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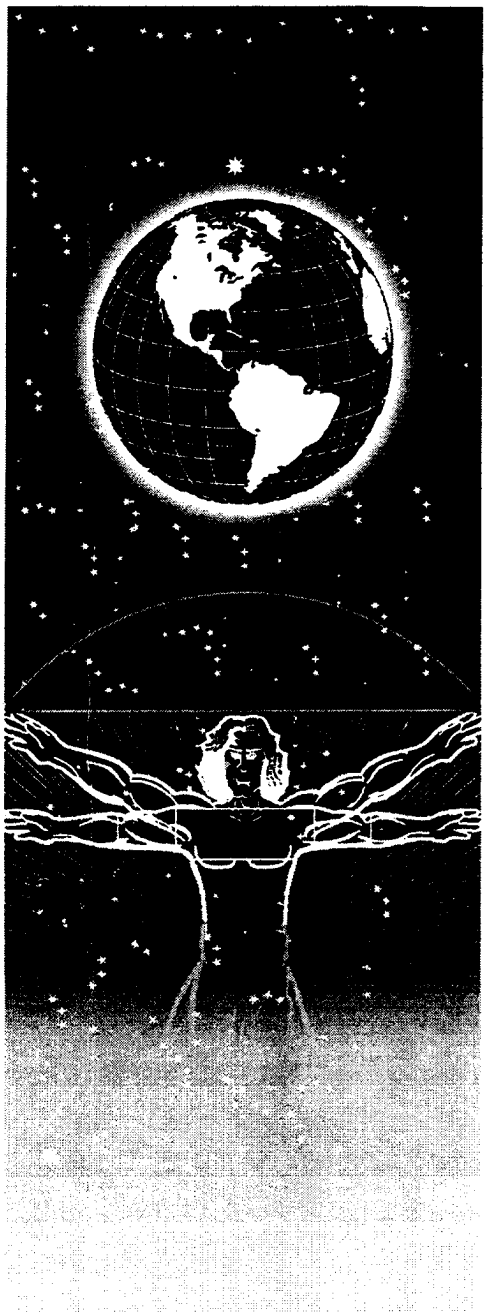

UNITED STATES AIR FORCE RESEARCH LABORATORY

DEVELOPMENT OF THE AIR FORCE-ARMY MILITARY SKILL LINKAGE SYSTEM (MISL)

Jeffrey Worst
Jan Bayer
Denise Lawson

BOOZ-ALLEN & HAMILTON, INC.
8521 Greensboro Drive
McLean VA 22102-3812

Doris E. Black

HUMAN EFFECTIVENESS DIRECTORATE
MISSION CRITICAL SKILLS DIVISION
7909 Lindberg Drive
Brooks AFB TX 78235-5352

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This report has been reviewed and is approved for publication.

DORIS E. BLACK
Project Scientist

LARRY T. LOOPER
Chief
Job Systems Research Branch

R. BRUCE GOULD
Acting Chief
Mission Critical Skills Division

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Jeffery Worst, Jan Bayer, Denise Lawson, Doris E. Black

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Booz-Allen & Hamilton, Inc.
8521 Greensboro Drive
McLean, VA 22102-3812

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Based on a need identified by Headquarters, Air Force Deputy Chief of Staff, Personnel, this effort developed and implemented a methodology for identifying comparable Army and Air Force military specialties. An extensive review, comparison, and documentation of current Air Force and Army jobs, identifying equivalent data elements and existing data bases was completed to provide candidate data elements for the linkage system. A methodology for linking Air Force and Army jobs was developed and validated by contractor and service representatives. The expert team job rating approach, results, and subsequent linkage system are described in the report.

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I. INTRODUCTION

In July 1996, research was initiated by the Air Force Armstrong Laboratory (AL) at the request of Headquarters Air Force, Contingency and Joint Matters Division (HQ USAF/DPXC) to develop and implement a methodology for identifying comparable or similar Air Force and Army military specialties. This requirement was issued for the purpose of enhancing current capabilities in crisis and wartime personnel planning for both the Air Force and the Army. The project resulted in the development of a specialty linkage database and a personal computer-based delivery system called the Air Force - Army Military Skill Linkage "MISL" System. This report documents major elements of the research project and includes information on the conceptual framework of the linkage methodology, detailed results of the methodology validation, complete documentation on the methodology for use in conducting future system updates, and highlights of the full-scale implementation results. Also provided as an Appendix to this report is the MISL System User's Manual.

Background on Operational Problem

The primary mission in crisis and wartime personnel planning is to identify the correct numbers of skilled personnel by specialty, where and when needed for duty. A major part of this work activity is resolving personnel shortfalls when they occur. As a result of increased and more lengthy deployment requirements in the past 3 to 4 years, in combination with force downsizing, Air Force and Army crisis and wartime personnel planners have begun to explore opportunities for sharing available personnel resources when necessary to fill personnel shortfalls in critical specialties which cannot be filled through other means. In particular, planners are interested in potentially sharing available assets in their individual augmentation programs (e.g., Individual Ready Reserve).

It is at this point Air Force planners identify the operational problem. That is, resolving personnel shortfalls with available personnel assets between Air Force and Army is complicated by the different occupational classification systems in use. There are no existing systems to support this crisis and wartime personnel planning requirement. Available Department of Defense occupational crosswalks are not sufficiently detailed to support comparable skills substitutions. Consequently, planners rely on ad hoc consultations with their respective service career field functional managers and senior career advisors to identify potential comparable specialties. Their only tools for this process are their military specialty classification manuals and their evolving corporate knowledge in this process. With the increased planning requirements and resulting increases in shortfall situations, this process is too time-consuming to be effective. Furthermore, planners have serious concerns about the accuracy of the substitutions identified in the process.

Project Objectives and Management

Based on the need identified by HQ USAF/DPXC, a 15-month research effort was conducted to develop and implement a methodology for identifying comparable Army and Air Force military specialties with the products from the effort consisting of the validated

methodology and an Air Force - Army Military Skill Linkage database and delivery system for use by planners in a search and retrieval mode. With this undertaking, the anticipated benefits are increased speed, accuracy and consistency in the resolution of personnel shortfalls during crisis and wartime personnel planning.

The project was conducted with collaboration by Defense Manpower Data Center (DMDC) and an Air Force/Army customer advisory group for steering and shaping the research effort. Offices represented on the advisory group included HQ USAF/DPXC, Army DCSPER Operations Division (DCSPER DAPE-PRO), DMDC, Joint Staff Manpower and Personnel Directorate (J-1/PRD), Army Research Institute, Air Force Personnel Center, and Air Force Manpower Readiness Flight.

The project was organized into six work phases with the following respective objectives:

- Review and evaluate current DOD military occupational databases and crosswalk systems to determine how effectively they could be used to develop the proposed system
- Identify and evaluate alternative methodologies for identifying comparable Army and Air Force specialties
- Conduct a validation study of the proposed methodology to determine its accuracy and consistency
- Implement the approved methodology across all Air Force and Army specialties
- Develop the specialty linkage database and delivery system for use by Air Force and Army planner customers
- Provide documentation and initial training to enable Air Force and Army planner customers to use the specialty linkage system.

II. METHODOLOGY DEVELOPMENT

Four research activities completed early in the project provided the basis for the logical framework used to develop the military specialty linkage methodology described in this section. First, a project kickoff meeting with the customer advisory group was held to determine the personnel planners' perspective and requirements concerning how closely Army and Air Force specialties must match in order to satisfy the mobilization exercises and crisis/wartime operations. From that meeting, researchers learned personnel planners desired a system which could identify other-Service counterpart specialties with a range of overlap (e.g., moderate through high overlap) on primary job duties and where proficiency could be expected to be that of a skilled journeyman (i.e., performs a job independently after a brief orientation period). In

the second activity, researchers completed an extensive comparison of the Army and Air Force classification systems documentation to identify all the equivalent data elements which could provide needed information on the similarity of the two services' specialties. Results from this comparison of classification systems are highlighted in the charts and table provided in Appendix A. Next, project researchers completed a review of existing military and civilian occupational databases and crosswalks available from DMDC to identify the potentially relevant data for development of the proposed specialty linkage methodology. Last, the research team formulated and evaluated candidate methodologies based on alternative assumptions, linkage criteria, and procedural steps. This section highlights the development of the alternative methodologies and describes the characteristics of the methodology approved by the customer advisory group.

Occupational Content Approach

The research team first investigated developing a linkage approach based on the comparison of military specialty content, responsibilities, skills, knowledge, and qualifications. To implement this linkage approach, detailed information would be needed on Air Force and Army occupations. The team conducted a comprehensive review of Air Force and Army occupational data sources to identify the most appropriate information for linking Air Force and Army occupations. The data sources that were reviewed included the Air Force and Army service classification manuals and existing DoD occupational databases. The following occupational classification manuals and formal schools catalogs were reviewed:

Army Publications

- AR 611-1. *Military Occupational Classification Structure Development and Implementation*
- AR 611-101. *Commissioned Officer Classification System*
- AR 611-112. *Manual of Warrant Officer Military Occupational Specialties*
- AR 611-201. *Enlisted Career Management Fields and Military Occupational Specialties*
- Department of the Army Pamphlet 600-3. *Commissioned Officer Professional Development and Utilization*
- Department of the Army Pamphlet 600-11. *Warrant Officer Professional Development*
- Army Regulation 600-200. *Enlisted Personnel Management System*
- Army Regulation 614-200. *Selection of Enlisted Soldiers for Training and Assignment*
- Department of the Army Pamphlet 351-4. *U.S. Army Formal Schools Catalog*
- Army Regulation 40-501. *Standards of Medical Fitness*

Air Force Publications

- Air Force Instruction 36-2101. *Classifying Military Personnel (Officers and Airmen)*
- Air Force Manual 36-2105. *Officer Classification*
- Air Force Manual 36-2108. *Airman Classification*

- AFCAT 36-2223. *USAF Formal Schools*
- Air Force Instruction 48-123. *Medical Examination and Standards*

Other Publications

- *Interservice Course Listing*. Interservice Training Organization ITRO
- DoD 1312.1-1. *Occupational Conversion Index*

From the review of these documents, the research team determined that the primary sources for occupational descriptions should be obtained from the classification manuals (i.e., AR611-101, AR611-112, AR 611-201, AFMAN 36-2105, and AFMAN 36-2108). These sources provided the best information for analyzing and comparing the duties, skills, and responsibilities of Air Force and Army occupations. The team believed the other manuals would be useful for determining and comparing occupational qualifications and training.

Automated Linkage Approach

The research team also investigated a second linkage approach using currently existing databases that link all military occupational codes (MOCs) to civilian occupational taxonomies. For example, the Military-Civilian Occupational Crosscode database, maintained by the Defense Manpower Data Center (DMDC), links all military occupational codes to similar occupations in the Department of Labor's *Dictionary of Occupational Titles* (DOT). Hence, if an Air Force and Army occupation are linked to the same DOT title, the occupations could be considered similar to each other. Military occupations are linked to two additional civilian occupational classifications:

- Occupational Employment Statistics (OES)
- Standard Occupational Classification (SOC)

Also available for consideration in the automated approach were two military occupational classifications which are different from those used by the five Services entitled DoD Occupational Conversion Index(DoDOCC) and Military Occupational and Training Data (MOTD).

If an automated approach could be satisfactorily implemented, then linkages between similar Air Force and Army MOCs could be identified using a computer database program and one or more of the currently existing linkage databases. The research team tested this approach with all five existing linkage systems on a subset of occupations and determined the approach was inadequate for the following reasons:

- Different taxonomies grouped occupations in significantly different categories
- Some occupational categories were too broad to provide useful links (e.g., OES category of "All Other Managers and Administrators")

The automated process identified occupational "links" between Air Force and Army Specialties which upon closer analysis were not similar in content, responsibilities, etc., and consequently, did not satisfy the needed level of precision for personnel planners. Hence, the research team concluded that the only way to form valid linkages of similar occupations would be through manually examining and comparing occupational content and qualifications.

Refinement of the Occupational Content Approach

Since the automated linkage approach was unsatisfactory, the research team proceeded to refine an approach for comparing occupational information. Because of the criticality of assessing occupational comparability for military operations, project researchers targeted an empirically-derived, highly structured occupational analysis process for this approach. Analysts reviewed work previously performed to crosswalk military occupations to civilian occupational taxonomies. (*Final Report on Applications of the Master Crosswalk and Its Use In Military Planning Models,* Booz, Allen & Hamilton, Inc., 1990). By working through several specialty linkage examples and assessing the utility of common information elements used in the Services' classification systems, the fundamental components for the linkage methodology were identified. They were the *content* and *qualifications* given in the military specialty descriptions. As would be expected, the basis for linking two example occupations depended on the "amount of overlap" in the content and qualifications of the occupations being compared. The only drawback noted by researchers with this approach, using Service classification information, was in the officer specialty information which is highly general in content as compared with enlisted specialties.

Job Content and Qualifications

In the analysis of job content, two aspects were available for comparison from each Service classification manual; critical job duties and level of responsibility (evidenced by words such as supervises, directs, etc.). The combination of these two aspects formed the basis for assessing the comparability of job content between occupations in the linkage methodology under development.

Several types of job qualifications were provided in the Service classification manuals and were adopted for use in assessing the equivalence of jobs. The following is a list of these qualifications:

- Education
  - degrees required
  - trade-offs between education and experience (e.g., a Bachelors degree or 2 years experience)

- Experience
  - amount
  - type

- Formal Training
  - specific courses required
  - location and duration of required training

- Physical Demands (enlisted only)
  - physical demands
  - PULHES (Physical capacity or stamina; Upper extremities; Lower extremities; Hearing and ear; Eyes; Psychiatric)

The research team determined that analysts would review available information about a pair of Air Force and Army occupations, and rate the strength of the match between the job content and job qualifications of the two occupations using the following three-point scale:

0 = no match
1 = weak match
2 = moderate match
3 = strong match

This analysis framework formed the basis of the methodology.

Variations to the Occupational Content Approach

The research team determined that the occupational content approach could be implemented in several ways. Each of the proposed linkage methodologies included a comparison of job content and job qualifications to establish a link between two occupations. Variations of the basic methodology are described below. These variations were presented to the Air Force/Army customer advisory group on 8 October 1996. For each methodology feature, the option chosen by the working group is noted.

Linkage Elements - MOC Only or MOC with Additional Codes

The first variation of the methodology refers to which occupational elements should be used for establishing linkages. One option is to establish all linkages at the basic military occupational code (MOC) level only. The other option is to include additional codes (e.g., additional skill identifiers, special qualifications identifiers) when establishing linkages. Table 1 describes each of these alternatives and notes the option chosen by the joint working group.

Table 1. Description of Occupational Elements for Establishing Linkages

Option 1: MOC Only	Option 2: MOC and Additional Codes	Working Group Decision
• Matches primary MOC with target MOCs • Terminates search for match once MOC comparisons have been made	• Matches primary MOC with target MOCs • Searches additional codes in other Service to match primary MOC	Match at the MOC level. Include Army additional codes only when no strong matches are found at the MOC level.

The potential consequences of each option were considered and discussed as part of the decision-making process. In summary, linking at the MOC only level would provide a smaller number of linked occupations than using MOC and additional codes because of differences in how Air Force and Army occupations are classified in their occupational taxonomies. In addition to providing a larger number of linkages, the use of additional codes would most likely produce more precise matches. The use of additional codes in all cases would have its drawbacks, however, due to the complexity and number of the different types of additional codes in both Services. It would not always be appropriate to provide linkages for certain types of codes (such as Air Force Special Experience Identifiers [SEIs]). Providing too much detail below the basic MOC level could, in some cases, make it more difficult for personnel planners to find an available match in the other Service. The customer advisory group selected a hybrid option that utilizes additional codes for establishing linkages only under certain circumstances.

Selection of Targets: Automated or Original Analysis

When forming linkages between occupations manually, the first step is to select one occupation (defined as the "primary occupation") and then determine to which occupations (defined as "targets") in the other Service it might be similar. The second variation of the methodology pertains to the technique used for identifying potential targets, or linkages for the primary occupation. While the DoD occupational linkage databases and crosswalks previously discussed do not provide the basis for accurate linkages to be formed between Air Force and Army occupations, they can provide a starting point. Potential targets could be identified using these databases and/or by reviewing (i.e., original analysis) the occupational taxonomies of both Services. Table 2 describes each of these alternatives, and identifies the approach chosen by the customer advisory group.

Table 2. Description of Approaches for Selecting Potential Targets

Option 1: Automated Target Selection	Option 2: Original Analysis	Working Group Decision
Uses existing DoD databases to identify potential matches	Reviews Service publications to identify similar occupations	Use both automated and original approaches to select potential targets. Find occupations using DoD databases and review each Service's occupational publications.

As with the linkage elements, the potential consequences of each option were considered and discussed as part of the decision-making process. Using information from DoD occupational databases to identify potential targets provides lists of occupations that have been grouped as related to one another for a variety of applications. The automated lists also provide a common starting point for the analysts in terms of the occupations being considered as potential targets. Relying solely on these lists, however, could constrain the search for matches to a list of occupations that were determined to be related based on crosswalks developed for purposes other than personnel planning. Again, the customer advisory group selected a hybrid option that utilizes both options.

Evaluation Approach: Team or Individual Analysis

The third way the methodology could vary is in the approach used to conduct the analysis of occupational content and qualifications. One option is to use a team of two analysts, who must reach consensus about each decision. The other option is to have individual analysts establish the linkages, with individual results being reviewed by a team. Each option is described in Table 3, and the customer advisory group's selection is noted.

Table 3. Description of Evaluation Approaches

Option 1: Team Analysis	Option 2: Individual Analysis	Working Group Decision
• Includes individual analysis of overlap in job content and qualifications • Incorporates team consensus at each step	• Includes team review of findings made by individual analysts • Provides quality review of results by experts	Use team analysis approach.

The potential consequences of the team versus individual approach were considered and discussed as part of the decision-making process. In summary, the team approach decreases the potential for individual bias to influence linkage results and increases the quality of the review process by having individuals work independently prior to reaching consensus. In essence, this type approach provides checks at each step in the process, encouraging analysts to perform further analysis when the team does not agree. Although the individual analysis method would take less time to implement, it would increase the potential for individual bias to affect results. The customer advisory group selected the team analysis option.

Decision Model: Liberal or Conservative

The final, and perhaps most significant, variation in the methodology are the decision rules for determining when an occupations is or is not linked to a primary occupation. The decision rules define to what degree occupational content and qualifications must be similar before two occupations are considered a link. Option 1 below is a conservative decision model where occupations must match on almost all duties and qualifications. Option 2 is more liberal and accepts partial overlap in duties and qualifications as sufficient criteria for a link. These options are described in Table 4 and the model chosen by the joint working group is identified.

Table 4. Description of Decision Models

Option 1: Conservative	Option 2: Liberal	Working Group Decision
Requires high degree of fit between occupations	Accepts partial matches between occupations	Use liberal decision model

The potential consequences of each option were considered and discussed as part of the decision-making process. The conservative model assumes that future users require precise matches. This option would produce fewer linkages between Air Force and Army occupations, but the linkages that would be identified would be strong matches. The liberal model which accepts partial matches between occupations, would provide a greater number of linkages that vary in their degree of relatedness. This model gives users greater flexibility, but it increases the need for users to gather more information to select the appropriate match. The customer advisory group selected the liberal decision model.

The final methodology chosen by the joint working group would link occupations at the MOC level, use both automated and original approaches for identifying target occupations, use team evaluation, and make linkage decisions using a liberal decision model.

III. METHODOLOGY VALIDATION

The next phase in the project was to validate the methodology approved by the customer advisory group on 8 October 1996. The research team used the approved occupational linkage methodology to establish linkages for a sample of occupational titles from the Air Force and Army taxonomies. The results of the analysis were evaluated to assess the validity of the methodology. Two aspects of validity were studied. First, the *consistency* of the methodology was assessed by comparing the results produced by two independent teams of analysts. Second, the results were reviewed by subject matter experts (SMEs) from the Air Force and Army to evaluate their *accuracy*. The statistical tests which were applied to the linkage results were carefully selected based on the characteristics of the test conditions and a review of Siegal and Castellan (1988) and Marascuilo and Serlin (1988). Each component of the validation approach is described in the sections that follow. During all phases of the validation, data were collected at the lowest level of detail possible so that any anticipated analyses could be easily conducted.

Sample Selection

The first step in the validation study was the selection of a sample of primary occupations on which to test the methodology. The research team coordinated sample selection with representatives from both the Air Force and the Army and a draft list of occupations was developed. The validation sample was selected using the following criteria:

- Equal number of occupations from the Army (15) and Air Force (15)
- Approximately equal number of officer and enlisted occupations
- Focus on career areas and occupations where substitutions will likely be needed
- Occupations recommended by the Air Force and Army

Air Force and Army representatives reviewed and revised the draft list of occupations. The final sample occupations were selected from the Transportation, Medical, Engineering, Communications, and Intelligence Career Fields. The occupations are listed below:

Air Force

43ExD	Bioenvironmental Engineer
44MxA	Oncology Internist
45GxA	Obstetrician and Gynecologist Endocrinology
32ExE	Electrical Engineer
32ExH	Explosive Ordnance Disposal Engineer
14NxA	Intelligence Operations
2E1x1	Satellite and Wideband Communications Equipment
2A1x3	Communication and Navigation Systems
2E6x1	Communications and Antenna Systems
3E0x2	Electric Power Production
3E2x1	Pavements and Construction Equipment
3E8x1	Explosive Ordnance
1N2x1	Signals Intelligence
1N3x3D	Serbo-Croat Crypto Linguist
1N6x1	Electronic System Security Assessment

Army

13A	Field Artillery, General
60U	Child Psychiatrist
62A	Emergency Physician
21B	Combat Engineer
88A	Transportation, General
131A	Field Artillery Targeting Technician
351B	Counterintelligence
31F	Network Switching Systems Operator - Maintainer
35Q	Avionics Flight Systems Repairer
35E	Radio and Communications Security (COMSEC) Repairer
51B	Carpentry and Masonry Specialist
62J	General Construction Equipment Operator
77W	Water Treatment Specialist
96D	Imagery Analyst
98G	Voice Interceptor

Consistency

The next step was to evaluate the consistency of the methodology. Two independent teams of analysts established linkages for each of the 30 sample occupations. The results of the two teams were compared to assess the methodology's consistency. In total, six analysts participated in this exercise. The analysts were rotated among teams for various subsets of occupations. Two teams (Team A and Team B) of two analysts worked independently to establish linkages for three sample occupations. Then, the teams were rearranged to establish linkages for the next three occupations. This was repeated until all 30 sample occupations had

been analyzed. Hence, there were various analyst pair combinations conducting linkages, preventing any systematic error resulting from pairing of individual analysts. The table below describes the rotation of the analyst teams.

Table 5. Rotation of Analyst Teams

Primary Occupation	Teams	Primary Occupation	Teams
AIR FORCE 1N2X1 ARMY 60U ARMY 62A	Team A: Analysts 4 & 5 Team B: Analysts 1 & 3	AIR FORCE 44MXA AIR FORCE 45GXA ARMY 96D	Team A: Analysts 3 & 4 Team B: Analysts 1 & 2
ARMY 13A AIR FORCE 1N3X3D AIR FORCE 1N6X1	Team A: Analysts 1 & 2 Team B: Analysts 3 & 4	AIR FORCE 32EXE ARMY 77W ARMY 62J	Team A: Analysts 1 & 5 Team B: Analysts 2 & 3
AIR FORCE 2E1X1 ARMY 35E ARMY 35Q	Team A: Analysts 1 & 5 Team B: Analysts 2 & 4	AIR FORCE 43EXD ARMY 88A ARMY 98G	Team A: Analysts 2 & 3 Team B: Analysts 1 & 5
AIR FORCE 2A1X3 AIR FORCE 2E6X1 ARMY 31F	Team A: Analysts 1 & 3 Team B: Analysts 4 & 5	ARMY 131A ARMY 351B AIR FORCE 3E0X2	Team A: Analysts 4 & 6 Team B: Analysts 2 & 5
AIR FORCE 14NXA AIR FORCE 32EXH ARMY 51B	Team A: Analysts 3 & 6 Team B: Analysts 1 & 4	ARMY 21B AIR FORCE 3E2X1 AIR FORCE 3E8X1	Team A: Analysts 2 & 6 Team B: Analysts 3 & 5

All six analysts were trained in the use of the methodology. The training involved a step-by-step discussion of the methodology, formalized analytical assumptions, and rating guideline definitions. Individual analysts recorded their ratings and comments on the Individual Analyst Worksheet and team ratings were recorded on the Team Analysis Worksheet developed for the validation exercise. The time to complete the analysis for each occupation was recorded on the worksheets.

The completed individual and team worksheets, along with supporting job descriptions, were maintained in two binders: one for Team A, and the other for Team B. Each set of findings was reviewed for quality control prior to being entered into the database. Once entered, the data were checked again for accuracy.

Accuracy

The accuracy of the methodology was tested by having 30 subject matter experts (SMEs) from both Services review the linkages for accuracy during several focus group sessions. They provided a criterion against which to measure the accuracy of the methodology. Since two sets of linkages were formed for each sample occupation, one set of linkages was randomly selected for review by the SMEs. SMEs were selected based on functional expertise in the sample occupations. In the Air Force, the SMEs were career field functional managers who are responsible for maintaining the specialty descriptions and position requirements within their areas of expertise. The Army SMEs were senior career advisors, functional experts who are

responsible for personnel assignments within their career fields. In addition, SMEs were selected from the metropolitan Washington DC area to preclude the need for travel and added funding.

Both the sample occupations and the SMEs were clustered into the following eight career areas:

- Communications (Enlisted)
- Intelligence (Enlisted)
- Intelligence (Officer)
- Engineering (Enlisted)
- Engineering (Officer)
- Medical (Officer)
- Transportation (Officer)
- Field Artillery (Enlisted, Warrant Officer)

A focus group was conducted for each career area and was moderated by the research team. Prior to arriving for the focus group session, all SMEs received a list of the sample occupations in their career areas.

SME Review Process

Each focus group consisted of Air Force and Army SMEs from one of the eight career areas. Their objective was to evaluate the linkages made by the research team. Each focus group began with a researcher briefing the SME team on the project purpose, an overview of the methodology, guidelines for rating each linkage, and their roles as SMEs. Next, the SMEs:

- Reviewed each primary and target occupation's job content and qualifications
- Reviewed researcher linkages
- Discussed the researcher linkages based on their subject matter expertise
- Reached consensus on whether or not they agreed with researcher linkages and ratings; clearly documented disagreements with researcher results
- Assigned a new overall rating to the linkage if they disagreed with researcher rating
- Identified and rated additional linkages for the primary occupation missed by the researchers
- Recorded their results on a Subject Matter Expert Review Worksheet

Researchers assisted the SMEs during the review process by ensuring that SMEs understood their task and followed the established guidelines. Researchers were able to gather extremely useful feedback during the course of the focus group discussions regarding discrepancies the SMEs had with the researcher results and the process SMEs used to link and rate target occupations.

Validation Results

The validation results are intended to measure the consistency and accuracy of the linkage methodology. As described above, the research team formed two independent sets of linkages for each of the 30 sample occupations.

Descriptive Statistics

Table 6 shows the number of occupations evaluated and rated by each team, and the total number of linkages identified (where the rating was equal to or greater than 1). As seen in the table, Team B evaluated a greater number of occupations as potential targets (129) than did Team A (101). Of those evaluated, Team B selected 83 as linkages and Team A selected 76 as linkages.

Table 6. Number of Target Occupations Reviewed and Linkages Identified

	Team A	Team B
Number of Target Occupations Rated	101	129
Number of Linkages Identified (Rating ≥ 1)	76	83
Average Number of Linkages Per Primary Occupation	2.5	2.8
Range of Number of Linkages Per Primary Occupation	0 (for 13A, Field Artillery, General) - 9 (for 2E1X1, Satellite and Wideband Communications Equipment)	0 (for 13A, Field Artillery, General) - 8 (for 21B, Combat Engineer)

Of the 30 sample occupations, 103 unique occupations were selected as linkages by Team A and/or Team B. All of the linkages for each of the 30 sample occupations can be found in Appendix B.

When the researchers formed linkages for each of the 30 sample occupations, they rated each overall linkage on a 0-3 scale. For each linkage, they also rated the similarity of each linkage's occupational content and qualifications. Table 7 identifies the frequency and percentages of these individual ratings. Included in this table are occupations that were evaluated but given a rating of 0 (i.e., no link). The total number of ratings made by all team members was 460. As seen in this table, the most common rating given to a match was a 1, with approximately 36 % of the ratings.

Table 7. Individual Analyst Ratings: Frequency and Percentages of Each Rating

Rating	Overall Ratings		Content Ratings		Qualifications Ratings	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
0	137	29.8	134	29.1	125	27.9
1	166	36.1	167	36.3	161	36.8
2	116	25.2	116	25.2	116	25.9
3	41	8.9	43	9.3	46	10.3

Researchers worked together in teams of two when forming linkages. Each of these teams had to come to consensus to form "team ratings" regarding the overall, content, and qualification ratings. Table 8, below, identifies the means and standard deviations of the team ratings. For each type of rating, two sets of averages are shown. First, the average for each team, including ratings of 0, are shown. Second, the average ratings only for occupations that were selected as linkages are shown.

Table 8. Team Ratings: Means and Standard Deviations

Target Occupations	Team Overall Ratings		Team Content Ratings		Team Qualifications Ratings	
	Team A	Team B	Team A	Team B	Team A	Team B
All occupations, including those rated 0	Mean: 1.21 S.D. = .93	Mean: 0.98 S.D. = .891	Mean: 1.22 S.D. = .93	Mean: 1.00 S.D. = .90	Mean: 1.26 S.D. = .94	Mean: 1.06 S.D. = .931
Occupations selected as linkages only (Rating ≥ 1)	Mean: 1.61 S.D.=.71	Mean: 1.53 S.D.=.63	Mean: 1.62 S.D.=.71	Mean: 1.53 S.D.=.67	Mean: 1.61 S.D.= .78	Mean = 1.51 S.D.= .81

Tables 9-11 show the frequency and percentages of team ratings (content, qualifications, and overall ratings). The most common rating was a 1, indicating that teams were most likely to evaluate a linkage as "weak."

Table 9 identifies, for each team, the frequency and percentages of job content ratings. Included in this chart are occupations that were evaluated but given a rating of 0.

Table 9. Team Ratings: Frequency and Percentage of Team Content Ratings

Rating	Team A Content Ratings		Team B Content Ratings	
	Frequency	Percent	Frequency	Percent
0	25	24.8	45	34.9
1	39	38.6	46	35.7
2	27	26.7	31	24.0
3	10	9.9	7	5.4

Table 10 identifies, for each team, the frequency and percentages of qualification ratings. Included in this chart are occupations that were evaluated but given a rating of 0.

Table 10. Team Ratings: Frequency and Percentage of Team Qualifications Ratings

Rating	Team A Qualifications Ratings		Team B Qualifications Ratings	
	Frequency	Percent	Frequency	Percent
0	24	23.8	43	33.3
1	36	35.6	44	34.1
2	30	29.7	32	24.8
3	10	9.9	9	7.0
N/A*	1	1.0	1	.8

*In some cases, there was insufficient information to give a rating on the match in qualifications.

Table 11 identifies, for each team, the frequency and percentages of overall ratings. Included in this chart are occupations that were evaluated but given a rating of 0.

Table 11. Team Ratings: Frequency and Percentage of Team Overall Ratings

Rating	Team A Overall Ratings		Team B Overall Ratings	
	Frequency	Percent	Frequency	Percent
0	25	24.8	46	35.7
1	40	39.6	45	34.9
2	26	25.7	32	24.8
3	10	9.9	6	4.7

Consistency Results

The findings produced by Team A and Team B were compared to evaluate the consistency of the methodology. Two aspects of consistency were reviewed: the similarity of linkages identified by the two teams and the strength ratings given to those linkages. The approach and results of the statistical tests used to evaluate each type of consistency are described next.

The first aspect of consistency that was tested was the consistency in selecting matches for the primary occupation. This was done by calculating the between-group agreement, or the extent to which each group selected the same occupations as matches. Across all occupations, the between-group agreement was 54.4%. Our calculations are described below.

First, we determined how many unique occupations were considered matches by both teams. Across the validation sample, Team A selected 76 targets as linkages to the primary occupations. Team B identified 83 linkages. In total, 103 unique jobs were considered matches to the same primary occupation by the two teams. Of the 103 matched jobs, 56 were identified as matches by both teams.

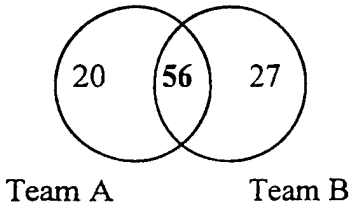


Figure 1. Number of Matches Found by Team A and Team B

Next, the between-group agreement was calculated by adding the number of jobs considered a match by both teams divided by the total number of unique jobs considered matches. For this sample, the result was 54.4%.

The between-group agreement was also calculated for each primary occupation; these results can be found in Appendix B. The between-group agreement for each primary occupation ranged from 0 to 100 percent. In reviewing the percent agreement calculations, the following conclusions were made:

- Agreement was lower for more technical occupations (e.g., communications) in which research analysts had less "expert knowledge."
- Low percentages sometimes reflected questions about the treatment of additional codes. Occupations were not included as matches made by both teams if one team included an additional skill identifier (with Army MOSs) or shredout (for Air Force AFSCs) that was not referenced by the other team.

The research team decided to solicit advice from the SMEs concerning how to treat additional codes. Based on SME feedback, decision rules regarding the application of additional codes and shredouts were formulated and used during the actual implementation of the methodology.

In addition to analyzing the agreement between groups of occupations selected as matches, several analyses were conducted to estimate how consistently teams applied the rating

guidelines. Target occupations were included in these analyses only when evaluated/rated by both teams, including occupations that received a rating of 0. A total of 27 primary occupations (out of 30) from the sample were included in the analyses. The missing occupations were Army Field Artillery, General (no jobs rated by either team), Air Force Civil Engineer, Electrical Engineer (no overlap in jobs rated), and Air Force Bioenvironmental Engineer (no overlap in jobs rated). There were 70 cases in total where Team A and B rated the same primary-target pairs.

To evaluate the consistency in strength of match ratings, three statistics were calculated. First, correlation coefficients between the strength ratings given by the two teams were calculated as a measure of the consistency of the results. Second, the Wilcoxon Signed Ranks test was used to determine if the ratings given by Team A and Team B were significantly different *across all occupations.* Finally, the Permutation Test was used to test the consistency of ratings *for each individual occupation.* Overall, the results of all three tests indicated that the ratings given by Team A and Team B were consistent. The results of each individual analysis are presented next.

Correlation Analyses

Table 12 shows the correlations between all types of team ratings. Of particular interest are the correlations (underlined) between the Overall, Content, and Qualifications ratings given by Team A and Team B. The range of these values, .57 - .68, indicates a "high moderate" level of agreement between the teams. All these relationships were statistically significant at the .01 level.

Table 12. Correlation Matrix Comparing Team Ratings[1]

	Team A Overall	Team A Content	Team A Qualifications	Team B Overall	Team B Content
Team A Overall	--				
Team A Content	.99**	--			
Team A Qualifications	.85**	.84**	--		
Team B Overall	.68**	.69**	.56**	--	
Team B Content	.58**	.59**	.52**	.94**	--
Team B Qualifications	.66**	.67**	.57**	.90**	.85**

[1] The noted correlations were calculated using Team A and Team B ratings across all occupations (N=70).
**$p < .01$

Wilcoxon Signed-Ranks Test

The Wilcoxon Signed-Ranks Test was used to evaluate the difference between the ratings given by Team A and those given by Team B. The Wilcoxon Signed-Ranks Test was chosen because it is a powerful test that considers both the direction and magnitude of the difference in ratings. Difference scores of greater magnitude are given more weight in determining if there is a statistical difference between Team A and Team B ratings.

The results of the Wilcoxon Signed-Ranks Test indicated that, across all sample occupations, the ratings given by Team A were **not** significantly different from those given by Team B. Table 13 shows the direction of differences for the ratings.

Table 13. Wilcoxon Signed-Ranks Test Results Across All Occupations

Differences in Ratings (number of cases)	Team Overall Ratings	Team Content Ratings	Team Qualifications Ratings
Number of cases where Team A > Team B	16	15	20
Number of cases where Team B > Team A	14	15	20
Number of cases where Team A = Team B	40	40	28
Significance of Difference in Ratings	Ratings not significantly different.	Ratings not significantly different.	Ratings not significantly different.

When differences did exist between the ratings given by Team A and Team B, they were small in magnitude. As seen in the table 14, there was only one instance where the overall ratings between Team A and Team B differed by more than one point.

Table 14. Frequency of Difference Scores Between Team A and Team B Overall Ratings

Difference in Ratings Between Team A and Team B (Overall Ratings)	Frequency of Occurrence
No Difference	40
Difference = 1	29
Difference = 2	1
Difference = 3	0

Permutation Test

To test the effect of team membership separately for individual occupations, the Permutation Test was used. This test is used to evaluate data from small samples, to determine if significant differences between two groups exist. In conducting this analysis, the following assumptions were made:

- Either team was equally likely to assign any given rating. (For example, the probability of Team A assigning a rating of "1" and Team B assigning a rating of "2" to a given job, is the same as the probability of Team A assigning a rating of "2" and Team B assigning a rating of "1.")
- Team A and Team B were establishing linkages under the same experimental conditions.

The results of the Permutation Test for each sample occupation can be found in Appendix C. The results indicate that, for each primary occupation, there were no significant differences between the match ratings given by Team A and Team B.

Accuracy Results

The SMEs reviewed the linkages and the ratings established by the research team. In some cases SMEs identified, and rated, additional linkages for each primary occupation within their career area of expertise. The result was a list, for each primary occupation in the sample, of the target linkages and ratings identified by the SMEs. These lists represent the "true" matches, and served as a benchmark for the accuracy analyses. As with the consistency analyses, two aspects of accuracy were reviewed: the accuracy of the research team linkages and the accuracy of the strength ratings given to those linkages.

The research team linkages were compared with the linkages identified by the SMEs. In general, the research team identified a greater number of linkages (78) than did SMEs (66). To test the accuracy of the linkages, the overlap in research team and SME linkages was identified. The overlap in linkages was calculated three ways: (1) the percent of SME linkages identified by the research team, (2) the percent of research team linkages identified by SMEs, and (3) the percent of linkages identified by both the research team and the SMEs.

Percent of SME Linkages Identified by the Research Team

The set of target occupations identified by SMEs as linkages, as discussed earlier, represents the "true" matches for the sample occupations. The first test of the research team's accuracy was to determine the percent of "true" matches that were identified by the research team. The SMEs identified a total of 66 linkages for the sample occupations. Of these 66, the research team correctly identified 53, or 80%, as linkages. Hence, the research team was able to identify 80% of the "true" matches using the methodology.

Percent of Research Team Linkages Identified by SMEs

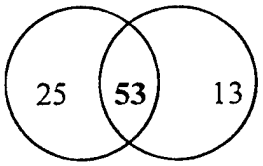
The SME level of agreement with the research team linkages was related to the strength of the linkage. When research team identified a link as weak (rating = 1), the SMEs were less likely to agree. As the strength of the research team links increased, so did the SME agreement with the links (see Table 15). These findings suggest that the methodology was less accurate in distinguishing the sometimes subjective difference between a "weak" match and a "non-match" (i.e., 1 and 0 on the rating scale).

Table 15. SME Agreement with Analyst Linkages

Strength Ratings of Analysts' Linkages	Percent Identified as Links by SMEs
Rating = 1 (42 matches, 54%)	45 (19 matches)
Rating = 2 (28 matches, 36%)	92 (26 matches)
Rating = 3 (8 matches, 10%)	100 (8 matches)

Percent of Linkages Identified by Both the SMEs and the Research Team

To determine the absolute overlap between the research team and SME linkages, a between-group agreement percentage was calculated. Across the validation sample, the research team selected 78 linkages to the primary occupations. The SMEs identified 66 linkages. In total, 91 unique jobs were considered matches to the same primary occupations by the research team and the SMEs. Of the 91 unique linkages, 53 were identified as matches by both teams (see figure below). The percent of agreement between the research team and SMEs was 58.2 percent. Appendix D contains the results of the percent agreement between the selected research team and the SMEs for each individual occupation.



Analysts SMEs

Figure 2. Number of Matches Found by Analysts and SMEs

Accuracy of Ratings

The research team ratings were compared to the ratings provided by the SMEs to assess accuracy in using the rating guidelines. Only the occupations that were identified as linkages by the research team were included in the analyses. The 13 occupations which were identified as

links by the SMEs but not rated by the research team were not included, since these were not rated by the research team. In total, there were 78 cases where the research team and the SMEs rated the same primary-target pairs.

To evaluate the accuracy in strength of match ratings, two statistics were calculated. First, a correlation coefficient between the strength ratings given by the research team and the SMEs was calculated Second, the Wilcoxon Signed-Ranks test was used to determine if the ratings given by the research team and the SMEs were significantly different *across all occupations*. The results of the tests indicated that, while there was a high-moderate relationship between the research team and SME ratings, there were a significant number of cases where the ratings differed between the two groups. The magnitudes of the differences, when they existed, were small.

Correlation Analysis

The correlation coefficient between the research group's overall ratings and the SME overall ratings was .70 and significant at the .01 level. This indicates that there was a high-moderate relationship between the ratings assigned by research team and those assigned by SMEs.

Wilcoxon Signed-Ranks Test

The results of the Wilcoxon Signed-Ranks Test indicated that, across all sample occupations, the ratings given by the research team and the SMEs were significantly different from one another. The direction of the difference, as indicated in Table 16, suggests that the research team gave higher ratings to the matches than did SMEs.

Table 16. Wilcoxon Signed-Ranks Test Results Across All Occupations for SME Results

Ranks	Team Overall Ratings
Number of cases where SME > analysts ratings	8
Number of cases where analysts > SME ratings	37
Number of cases where analysts = SME ratings	33
Significance of difference in ratings	Ratings significantly different

When differences did exist between the research team and SME ratings, they were small in magnitude. As seen in Table 17, there were only two cases where the research analysts and SME ratings differed by more than one point.

Table 17. Frequency of Difference Scores Between Analyst and SME Overall Ratings

Difference in Ratings Between Analysts and SMEs	Frequency of Occurrence
No Difference	33
Difference = 1	43
Difference = 2	2
Difference = 3	0

SME Feedback

The subject matter experts provided the research team with very useful information regarding the establishment of linkages. This information included specific technical knowledge (e.g., for communications occupations) and approaches for using additional codes. For each career field included in the validation sample, the research team developed worksheets outlining the "lessons learned" from SMEs. The worksheets were used to help guide analysts during the full implementation of the methodology.

Overall, the SMEs thought the research team's methodology effectively used available information for establishing linkages between occupations. Other comments obtained from the SMEs included:

- The database of linkages will provide a much needed tool for personnel planners
- The usefulness of linkages is highly dependent on the specific environment and position requirements of the job being filled
- Target occupations should not be selected without consideration of specific duty requirements
- Ratings of linkages should not be included in the final delivery system database, as they may be misleading
- Specialty description information must be included in the database for personnel planners to make informed decisions
- Certain AF Special Duty Identifiers and Reporting Identifiers may serve as stand-alone occupational codes and be included as primary occupations when forming linkages
- Additional occupational codes (e.g., ASI's) may be necessary to establish linkages in some cases (e.g., biomedical career fields)

Summary and Conclusions

The validation study on the proposed specialty linkage methodology was designed to evaluate the consistency and accuracy of the methodology. Thirty Air Force and Army specialties selected by the customer advisory group were used in the study.

For the consistency analysis, the objective was to determine whether the proposed methodology produces similar results when applied by different sets of analysts. The analysis

compared both the specialty linkages identified and the corresponding strength of match ratings obtained from the independent analyst teams. The analysis of the specific specialty linkages identified by independent teams showed there was 54.4 % agreement on 103 unique jobs identified as matches by the teams for the 30 primary occupations. The strength of match ratings on the linkages identified by the teams were significantly correlated with high moderate values ranging from .57 - .68. From these analyses, it was determined agreement between teams was lower for the more technical occupations in which analyst teams had less "expert knowledge." Also, the use of additional codes by the teams was not systematically applied. As a result, enhancements to the proposed methodology were identified to (a) incorporate consultations with service subject-matter experts as needed, and (b) establish uniform decision rules for the treatment of additional codes.

While only a modest level of consistency was obtained in the validation study and was attributed in part to the need for additional processes and decision rules, project researchers believe the results are artificially low for an additional reason. That reason is the range of 30 specialties used in the validation. Several were chosen which the customer advisory group knew would present difficulties in determining their linkages. Hence, the validation sample was not representative of the total universe of occupations in the Air Force and Army but is substantively skewed.

In the second part of the validation, the accuracy of the methodology was tested by having SMEs from both Services review the specialty linkages obtained for the validation sample of specialties. The analysis of linkage accuracy indicated the proposed linkage methodology successfully identified a substantial number (80%) of correct linkages, as established by the SMEs. Assessment of strength of match ratings showed a high moderate correlation (.70) in an overall comparison between SME and analyst team ratings. However, an analysis on a one-by-one basis showed a significant number of cases where the SME and analyst team ratings differed, with the analyst ratings being one point higher in 43 out of 78 instances, two points higher in 2 instances, and identical in 33 instances. Thus, strength of match ratings assigned by the analyst team tended to be higher than SME ratings, but were typically no more than one point greater.

Researchers concluded the proposed linkage methodology provided a satisfactory level of agreement with SMEs in accurately identifying linkages. Furthermore, like the consistency analysis results, the accuracy level obtained was suspected to be artificially lower since several validation occupations were difficult to link. On the other hand, the differences in strength of match ratings between SMEs and analysts did identify an area of concern to researchers that was subsequently addressed and resolved by the Air Force/Army customer advisory group when the validation results were reported.

The overall results of the validation study were very promising, particularly in view of this effort (a) being the initial test for a complex occupational comparison not previously undertaken, (b) using a methodology which had not been fully refined, and (c) employing a validation sample which was skewed toward more difficult occupations to link. The validation study confirmed the methodology could be used by occupational analysts to correctly identify similar occupations between the Air Force and Army.

In February, 1997, researchers presented validation study results to the Air Force/Army customer advisory group. The following refinements were made to the methodology during the meeting, and the resulting methodology was approved for implementation by the advisory group:

- Army warrant officers would only be linked to Air Force officers
- Linkages formed by the SMEs for the 30 validation sample occupations would be incorporated into the final database of linkages
- Since the linkage results are reciprocal, linkages would be formed in one direction using the Air Force as the primary occupational titles
- Strength of match ratings would not be displayed to linkage system users. Instead, the list of targets linked to a primary occupation would be sequenced in descending order on match rating and with an asterisk (*) beside the occupation(s) rated "3" (i.e., strong match).

Other conclusions discussed in the advisory group meeting acknowledged that the specialty linkage database being developed with the proposed methodology will provide a much needed tool for personnel planners. However, with the expected availability of the final linkage system to a potentially wider range of users, information should be disseminated with the system that explains the effectiveness of the linkage database is highly dependent on the user, since the linkages represent options for personnel planners and not exact matches. Prospective system users must be very familiar with specific personnel needs to be filled, and use the linkage system as a source to quickly identify a small group of occupations in the other Service which can be considered as alternatives and not exact matches.

IV. FINAL METHODOLOGY

After the Air Force/Army customer advisory group approved the linkage methodology, the research team began the process of operationally implementing the methodology across all Air Force and Army occupations. The purpose of this section is to document in detail the methodology used to link similar Air Force and Army occupations.

All primary occupations were from the Air Force and linked to target occupations in the Army. Since the approved methodology defined each link as reciprocal, the linkage only had to be done in one direction (i.e., Air Force → Army). After all of the linkage were formed, analysts identified all Army occupations which had no links and verified that there were no similar occupations in the Air Force.

Each team of analysts was assigned an Air Force career field and directed to determine linkages for all of the occupations in the career field. This enabled the team to become very knowledeable of the career field and of similar career areas and occupations in the Army. The research team found this to be a far more efficient and reliable approach than assigning occupations to teams at random. If teams were having trouble determining occupational content

or qualifications from the Service manuals, they would call subject matter experts in the Air Force and/or Army for assistance. Although the SMEs were very helpful in clarifying occupational content and/or qualifications, the actual linkage and rating decisions were made by the analysts.

In addition, the research team requested guidance from the Air Force/Army advisory group on how to treat very senior level officer and enlisted occupations. The advisory group decided that very senior level officer and enlisted occupations would not be linked since they have broad supervisory duties and would probably never be backfilled by members from another Service.

The remainder of this section includes the following:

- Detailed description of the steps used by analysts to link occupations
- Decision rules used by analysts to guide the linkage of occupations
- Rating guidelines, benchmarks, and definitions
- Examples of individual and team worksheets

This documentation provides all of the information necessary for analysts to conduct future updates of the database using the approved methodology.

Steps for Linking Air Force and Army Occupations

General Instructions:

- Each team member should review the occupations in the career field to gain an understanding of how the career field is structured prior to beginning the analysis of the individual occupations.
- Each analyst will have a complete set of occupational descriptions from the Air Force and Army classification manuals to use during the analysis. (Each two volume set of descriptions will be labeled with the analyst ID code).
- Each team member will write the individual analysis results on the Individual Analyst worksheet (see figure 4). One team member will be responsible for completing the Team Analysis worksheet (see figure 5).
- Analyst ID codes should be listed on the top of the Individual Analyst worksheets and at the top of the Team Analysis worksheets.

Step 1: Identify Air Force Occupation. List the name and code of the occupation on your Individual Analyst worksheet. From this point forward, this occupation will be referred to as the primary occupation or job.

Step 2: Outline Primary Occupation. Highlight the critical duties, qualifications, and other requirements of the primary occupation. This information will be compared to the duties, qualifications, and other requirements of other occupations to determine if a match exists.

2.1 At the top of the Team Analysis Worksheet, write down the code and title of the primary occupation. You will use this worksheet to list your team ratings for all occupations.

2.2 Each analyst independently highlights the major/critical **duties** of the primary job in their respective set of occupational descriptions

- Critical duties are comprised of activities, or tasks
- If possible, highlight a verb and a noun which succinctly describe the duty (e.g., repairs radios)
- Identify between 3 and 6 duties
- Include verbs which show evidence of responsibility if they are part of major duties (e.g., supervises...)

EX.: Still Photographic Specialist

1. Performs still photography: (CRITICAL DUTY)
   - Photographs subject matter (Task)
   - Selects appropriate lens and accessories (Task)
   - Selects and employs appropriate lighting equipment (Task)
2. Processes and prints b/w and color sensitized materials:
   - Processes film
   - Makes contact and projection prints
3. Operates conventional processing and printing equipment:
   - Prepares photographic chemistry
   - Establishes and maintains chemical balance of solutions
   - Performs preventative maintenance and equipment calibration

2.3 Next, review the qualifications of the primary occupation. Consider if they are mandatory or just desirable. Think about any trade-offs between education and experience.

- Identify required **education level** of primary job
- Identify **specific courses** required in primary job (**only courses specified for basic job, not for higher levels within the MOC**)
- Determine amount and type of **experience** needed for primary job
- Review physical requirements (if any)

2.4 Discuss your findings with your teammate. Reach a consensus about the important duties of the job, and the importance of the qualifications.

Step 3: Identify Potential Target Occupations in the Army. The result of this step will be a list of possible target occupations or jobs.

3.1. Obtain computer generated reports showing related groups of occupations between the two Services from the following Defense Manpower Data Center's occupational database products: MOTD, DoDOCC index, and the MOC-OES crosswalk..

3.2. Review classification manuals to identify any other relevant occupation and career field titles that did not appear on the computer generated reports. The jobs identified in this

step should be added to the automated list obtained in 3.1. This list will be referred to as the target occupation list.

3.3. Choose a team member to quickly read the job description of each target occupation. Refer to the highlighted duties from the primary occupation. If the team determines that there is no overlap in job duties, remove the target occupation from the list of potential matches.

3.4. On the Team Analysis worksheet, write down the title and code of each occupation that remains on the target occupation list.

Steps 4 - 6. Complete these steps for each target occupation. Refer to the *Analytical Assumptions* section beginning on the following page, *the Occupational Rating Guidelines Graphic* (figure 3), and *Benchmarks for Ratings* (Table 18) when completing these steps. Worksheets used for individual and team analysis are also included (see figures 4 and 5).

Step 4: Evaluate Equivalence of Job Content.

4.1 Each analyst independently highlights the major/critical duties of the target job in their respective set of occupational descriptions

- If possible, highlight a verb and a noun which succinctly describe the duty (e.g., repairs radios)
- Identify between 3 and 6 duties
- Include verbs which show evidence of responsibility if they are part of major duties (e.g., supervises...)

4.2 Rate the overall match in job content, using a scale of 0 to 3 (0 = no match, 1 = weak match, 2 = moderate match, 3 = strong match). Individually rate the match, and write it on your Individual Analyst worksheet. If there is no match in job content, proceed to the next target.

Step 5: Evaluate Equivalence in Job Qualifications. This will include a comparison of the required education level, amount and type of experience, any specific course requirements, and any physical requirements. Use this information to rate the match on job qualifications. When evaluating each match, determine if a qualification is mandatory or if there is a reasonable trade-off between education and/or experience.

5.1 Review the qualifications of target occupation. Consider if they are mandatory or just desirable. Think about any trade-offs between education and experience.

- Identify required **education level** of target job
- Identify **specific courses** required in target job (**only courses specified for basic job, not for higher levels within the MOC**)
- Determine amount and type of **experience** needed for target job

5.2 Compare required education.

- Find evidence of equivalent educational requirements in primary and target job

5.3 Compare **specific course requirements.**
- Find evidence of same courses or courses in primary and target job

5.4 Compare required **experience.**
- Find evidence of similar experience qualifications in primary and target job

5.5 Compare physical and medical (e.g., vision) requirements of occupations when pertinent
- Find evidence of similar physical/medical requirements in primary and target job

5.6 Rate the overall match in job qualifications, using a scale of 0 to 3. In making this determination:
- Evaluate similarity of knowledge needed
- Consider if education/course/experience requirement is *mandatory* or *desirable*
- Assess trade-offs between education and experience

Rate match on a scale of 0 to 3 (0 = no match, 1 = weak match, 2 = moderate match, 3 = strong match). Individually rate the match, and write it on the Individual Analyst worksheet.

Step 6: Rate the Overall Match Between Primary and Target Occupation. At this point, determine the overall match, taking the *Analytical Assumptions* and *Occupational Rating Guidelines* at the end of the chapter into account. In general, the overall rating will be the same as the rating in job content. The only exceptions are cases where the qualifications indicate that the level of responsibility between jobs is significantly different.

Rate match on a scale of 0 to 3 (0 = no match, 1 = weak match, 2 = moderate match, 3 = strong match). Rate this independently, and write the rating on your Individual Analyst worksheet. After the overall rating has been assigned by each individual, the analysts should discuss their final ratings and reach a team consensus for content, qualifications, and overall ratings. The team consensus ratings should be the only ratings that are written on the Team Analysis worksheet. Once the team reaches a consensus, proceed to the next target occupation on the list and repeat steps 4-6 until all target occupations have been reviewed for a given primary occupation.

If after reviewing all targets there are no matching occupations, or no target occupations having an overall rating greater than 1, look for additional codes (e.g., SQI, SI, ASI) that match the job content or qualifications. These codes are not linked as stand-alone codes, but are considered in conjunction with a target MOC. Follow steps four through six in comparing these codes against the primary occupation.

Analytical Assumptions

1. Linkages to target occupations will be established within the same enlisted/officer community as the primary occupation with the exception of warrant officers. (For example,

an officer occupation of Optometrist would not be linked to an enlisted occupation of optical technician).

2. When assigning ratings to linkages, analysts should consider the degree of overlap between the primary and target occupations using a two-way test approach. The overall degree of overlap without respect to the starting direction should drive the assignment of the ratings.

Job Content

When assigning job content ratings the analyst should evaluate the equivalence of the job duties actually being performed rather than comparing the skills that may be necessary to perform the job duties. By focusing on the actual activities performed, the content rating will reflect the similarity in job duties.

1 Rating: There is some overlap on a significant part of the job.

2 Rating: There is some overlap on several job duties, or significant overlap on at least one critical job duty.

3 Rating: There is significant overlap on all critical job duties. Any missing duty must be deemed non-critical.

Qualifications

When assigning qualifications match ratings the analysts should consider the importance of the qualifications with respect to the specific job being linked. If the qualifications being compared are very general in nature (e.g., high school diploma), they should not weigh heavily in the assignment of the qualifications match rating. More emphasis should be placed on comparing specific technical course content rather than on general education requirements to avoid assigning an inflated rating.

1 Rating: This position has some match in qualifications, but is lacking in at least one area that could significantly impact someone's ability to perform the job.

2 Rating: This position has some match in qualifications, but *does not* lack in an area that would most likely significantly impact someone's ability to perform the job.

3 Rating: This position relatively matches on all significant qualifications requirements.

Overall Match Ratings

When assigning overall match ratings the analysts should consider the importance of the content and qualifications rating with respect to the specific job being linked. The content rating should be viewed as the rating for the relationship between the primary and target occupations, unless a review of the qualifications indicates that significantly different skill levels are required. If the

qualifications being matched are very general in nature, they should not weigh heavily in the assignment of the overall match rating.

1 Rating: A person with this target occupation would most likely be able to perform a portion of the primary job that may be considered significant; however, either does not show evidence of an ability to perform more than a single portion of the job, or, is lacking in some significant qualification that could possibly preclude the individual from performing the job.

2 Rating: A person with this target occupation would most likely be able to perform more than one significant primary job duty but would require additional guidance and/or training to be fully functional. Qualifications may not match completely, but there does not appear to be a lack in any significant qualification.

3 Rating: A person with this target occupation can most likely perform all significant job duties of the primary occupation. There does not appear to be a lack in any significant qualification and training should only need to be limited to familiarization with local conditions.

The graphic below was developed to help analysts when making ratings of occupational linkages.

Job Rating Guidelines

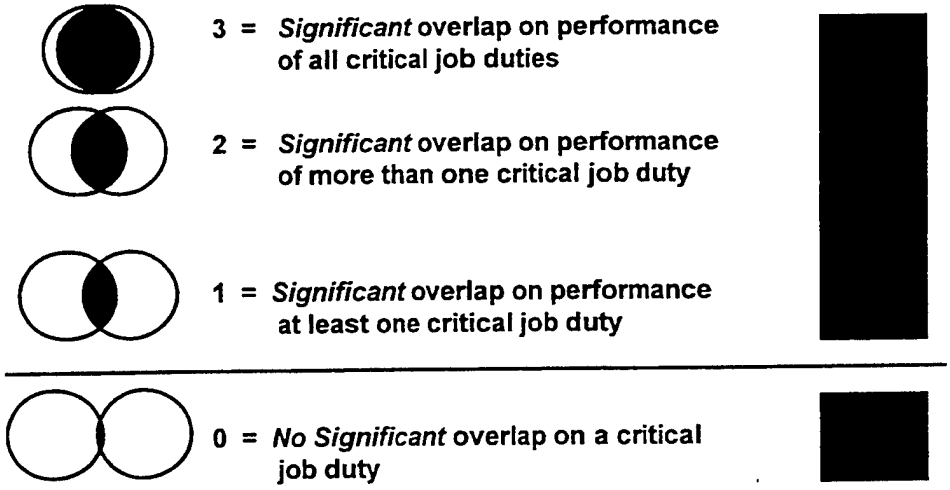


Figure 3. Occupational Rating Guidelines Graphic

Table 18. Air Force-Army Linkage Worksheet: Benchmarks for Ratings

Primary Occupation	Comparison 1	Comparison 2	Comparison 3	Comparison 4
MOC/Title: Army 25V, Combat Documentation Production Specialist	**MOC/Title: Air Force 3V0X2: Still Photographic**	**MOC/Title: Air Force 3V0X3: Visual Information Production-Documentation**	**MOC/Title: Air Force 3N0X2: Radio &TV Broadcasting**	**MOC/Title: Air Force 3V1X1: Imagery Production**
JOB DUTIES				
Supervises, plans, and operates electronic and film based still, video, and audio equipment	"supervises still photographic functions" "operates still photo-graphic camera and laboratory equipment"	"operates camera, lighting, and related equipment" "operates ancillary television production equipment"	"operates radio and television broadcast equipment" "supervises radio and television broadcast operations"	
Operates broadcast, TV, production and distribution equipment		"programs, directs radio and television broadcasts' "operates radio and tele-vision broadcast equipment"	"operates radio and television broadcast equipment"	"operates and supervises operation of imagery processing equipment" "performs film and paper processing"
Creates visual information products	"accomplishes still photography" "coordinates photo-graphic layout and design"	"performs visual information editorial functions" "supervises or performs visual information functions"	"prepares informational materials" "coordinates use of graphics"	
Performs maintenance on assigned equipment	"performs preventive maintenance on photographic equipment"	"performs operator maintenance on equipment"		
Periodic maintenance checks on vehicles and generators				
Strength of Match in Job Duties (0 to 3)				
rationale for rating	2: Overlap on several job duties. Performs photographic part of job.	3: Overlap on 4 out of 5 duties. Assumed that duty 5 is less imp.	2: Overlap on several duties. Performs broadcast part of job.	1: Performs very small part of job, but there is some overlap.

Table 18. Air Force-Army Linkage Worksheet: Benchmarks for Ratings (continued)

Primary Occupation	Comparison 1	Comparison 2	Comparison 3	Comparison 4
JOB QUALIFICATIONS				
Education Required				
High school graduate or equivalent	High school degree mandatory	High school degree mandatory	High school degree mandatory	High school degree mandatory
Specific Courses/ Certification				
MOS 25V Course (mandatory)	Basic still photographic desirable	Motion picture and television course mandatory	Basic broadcasting course mandatory	Basic imagery production course mandatory
Experience				
N/A				
Physical/Medical Requirements (Enlisted only)				
111221 (PULHES)	222211	222211	3333333	3333331
Normal color vision	Normal color vision	Normal color vision		Normal color vision
Strength of Match in Qualifications (0 to 3) (rate this independently, then reach group consensus)				
	2: Missing combat documentation course	2: Missing combat documentation course	1: Significantly less physical demands, missing combat documentation course	2: Missing combat documentation course; somewhat lower physical demands
Strength of Overall Match (0 to 3) (rate first, then reach group consensus)				
	2: Performs a part of the job but would likely require training	3: Only aspect of job that is missing is combat-related. Since all soldiers should be at least partially qualified in combat, still warrants a 3.	2: Performs a part of the job but would likely require training	1: Position involves some relevant skills, but would require substantially more training than other positions noted here

Individual Analyst:
Analyst ID:

Air Force/Army Linkage Worksheet
Individual Analysis

Primary Occupation: _____
Target Occupation: _____
Job Content Rating: _____
Job Content Notes: _____

_____

_____

_____

Education Qualifications: _____

_____

Specific Course Qualifications: _____

_____

Physical/Medical Qualifications: _____

_____

Qualifications Rating: _____

Overall Rating: _____

Figure 4. Individual Analysis Worksheet

Air Force/Army Linkage Worksheet
Team Analysis

Team #:
Date:

Primary Occupation:	
	Consensus Rating
Target Occupation: *Source:*	Job Content: Qualification: **Overall:**
Notes:	*Time In:*
	Time Out:
	Total Time:
	Consensus Rating
Target Occupation: *Source:*	Job Content: Qualification: **Overall:**
Notes:	*Time In:*
	Time Out:
	Total Time:

Figure 5. Team Analysis Worksheet

V. FULL-SCALE IMPLEMENTATION

Project research analysts completed the Air Force - Army military specialty linkages during the period February through August 1997. Also during that time project computer programmers completed development of the microcomputer-based MISL delivery system. In the following, some summary information from each of these phases of work is provided.

Linkage Results Summary

The occupational information used to develop the Air Force - Army specialty linkage database was for occupational specialties current through 12/31/96. The specific specialties within each of the Services for that time period are listed in Appendices A-3 and A-4. Table 19 provides information on the total number of Air Force and Army specialties which were under consideration for this effort and also reports the number of occupational linkages identified, with the information broken down by military community. As shown in the table, out of 963 occupational linkages identified, 285 were among enlisted specialties and 678 were among officer and warrant officer specialties.

Table 19. Air Force and Army MOCs as of 31 Dec 96
Total Number of Specialties/Number Linked

	Enlisted	Warrant Officer	Officer
Air Force			
AFSCs	293/194	N/A	494/257
Special Duty Identifier	16/5	N/A	11/2
Reporting Identifier*	8/2	N/A	7/1
Total	317/201	N/A	512/260
Army			
MOC	250/137	63/23	189/163

* Only Reporting Identifiers that are occupational in nature are included.

Table 20 gives a breakdown of the strength of match ratings obtained across the 963 specialty linkages. As reported in the table, strong ("3") match ratings occurred in only 145 of the 963 linkages. In addition, strong matches occurred predominately in enlisted specialties.

Table 20. Air Force - Army Specialty Linkage
Overall Strength of Match Ratings by Community

Strength of Match Rating	Enlisted Specialties	Officer & Warrant Officer Specialties	Total
1	133	447	580
2	67	171	238
3	85	60	145
Total	285	678	963

Since the linkage methodology can yield several potential target matches for a given primary (shortfall) specialty, Table 21 was developed to report the incidence of multiple linkages by Service and Community. As shown in the table, most linkage situations for Air Force enlisted occupations involve one target. For Air Force officers, most linkages involve two to five targets. Similarly, for Army enlisted specialties, most linkages involve one target, while for officers and warrant officers, most linkages involve one target and two to five targets, respectively.

Table 21. Incidence of Linked Targets Across Specialties

Service and Community	Specialties with 1 Target	Specialties with 2-5 Targets	Specialties with > 6 Targets
Air Force			
Enlisted	147	53	1
Officer	116	126	18
Army*			
Enlisted	94	39	4
Warrant Officer	14	9	0
Officer	70	72	21

*Excludes links that require Additional Skill Identifiers.

Appendix Tables E-1 through E-5 provide information on the incidence of linked targets by occupational field for each Service and community.

Air Force - Army MISL System Overview

The MISL System database and delivery system were implemented by the project research staff in a stand-alone, self-executing microcomputer program. The software is very easy to use and requires only a brief period of familiarization. Users enter search criteria for an occupation for which they would like to find matches in the other Service. The system then returns a list of potential target occupations that might be considered to backfill a shortfall situation. Users have the ability to view and compare occupational descriptions on-screen to assist in the selection of appropriate matches. All occupational information in MISL is from the Air Force and Army classification manuals. These applications are obtained through a fully automated, Windows-based system described in more detail in the User's Manual at Appendix F.

In August 1997, a final demonstration and training session on the MISL System was provided for customer advisory group members and selected potential users. The group acknowledged the system's ease of use and anticipated usefulness for providing the kind of support envisioned when the project was initiated. Group members were given copies of the system on diskettes and were encouraged to run the system on their office PCs and provide information on any problems prior to system finalization in September 1997.

By the conclusion of the project, plans were underway for a technology transition project during FY98 to move the MISL system to an operational office for future management and

semiannual updates. The terms of the tentative management agreement were under development with DMDC by Armstrong Laboratory and the Air Force and Army Deputy Chiefs of Staff for Personnel.

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Siegal, S. & Castellan, J. Jr. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, 1988

Army Publications

- AR 611-1. *Military Occupational Classification Structure Development and Implementation*
- AR 611-101. *Commissioned Officer Classification System*
- AR 611-112. *Manual of Warrant Officer Military Occupational Specialties*
- AR 611-201. *Enlisted Career Management Fields and Military Occupational Specialties*
- Department of the Army Pamphlet 600-3. *Commissioned Officer Professional Development and Utilization*
- Department of the Army Pamphlet 600-11. *Warrant Officer Professional Development*
- Army Regulation 600-200. *Enlisted Personnel Management System*
- Army Regulation 614-200. *Selection of Enlisted Soldiers for Training and Assignment*
- Department of the Army Pamphlet 351-4. *U.S. Army Formal Schools Catalog*
- Army Regulation 40-501. *Standards of Medical Fitness*

Air Force Publications

- Air Force Instruction 36-2101. *Classifying Military Personnel (Officers and Airmen)*
- Air Force Manual 36-2105. *Officer Classification*
- Air Force Manual 36-2108. *Airman Classification*
- AFFECT 36-2223. *USAF Formal Schools*
- Air Force Instruction 48-123. *Medical Examination and Standards*

Other Publications

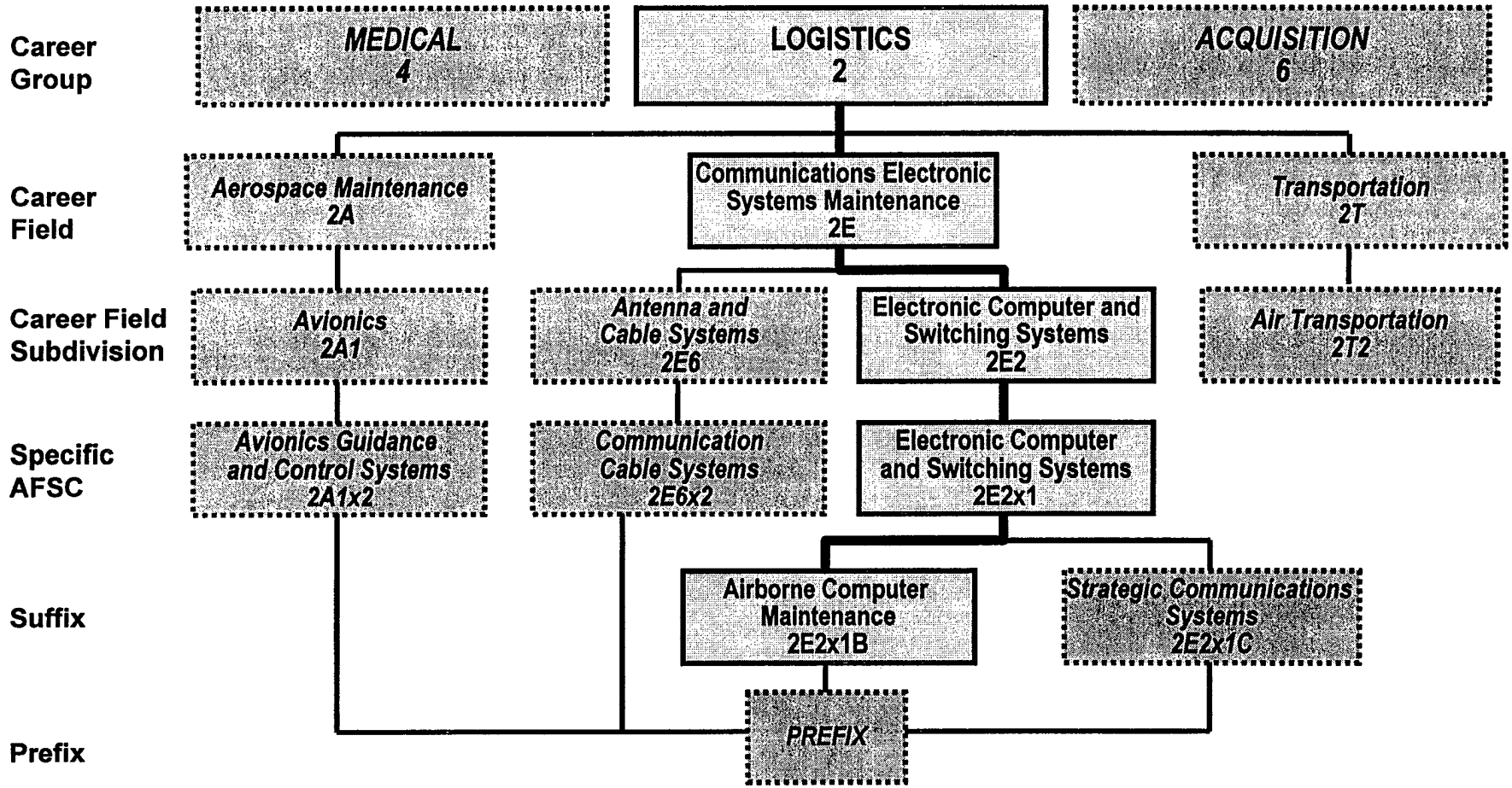
- *Interservice Course Listing.* Interservice Training Organization ITRO
- DoD 1312.1-1. *Occupational Conversion Index*

APPENDIX A
COMPARISON OF AIR FORCE AND ARMY CLASSIFICATION SYSTEMS

Air Force Occupational Classification Structure

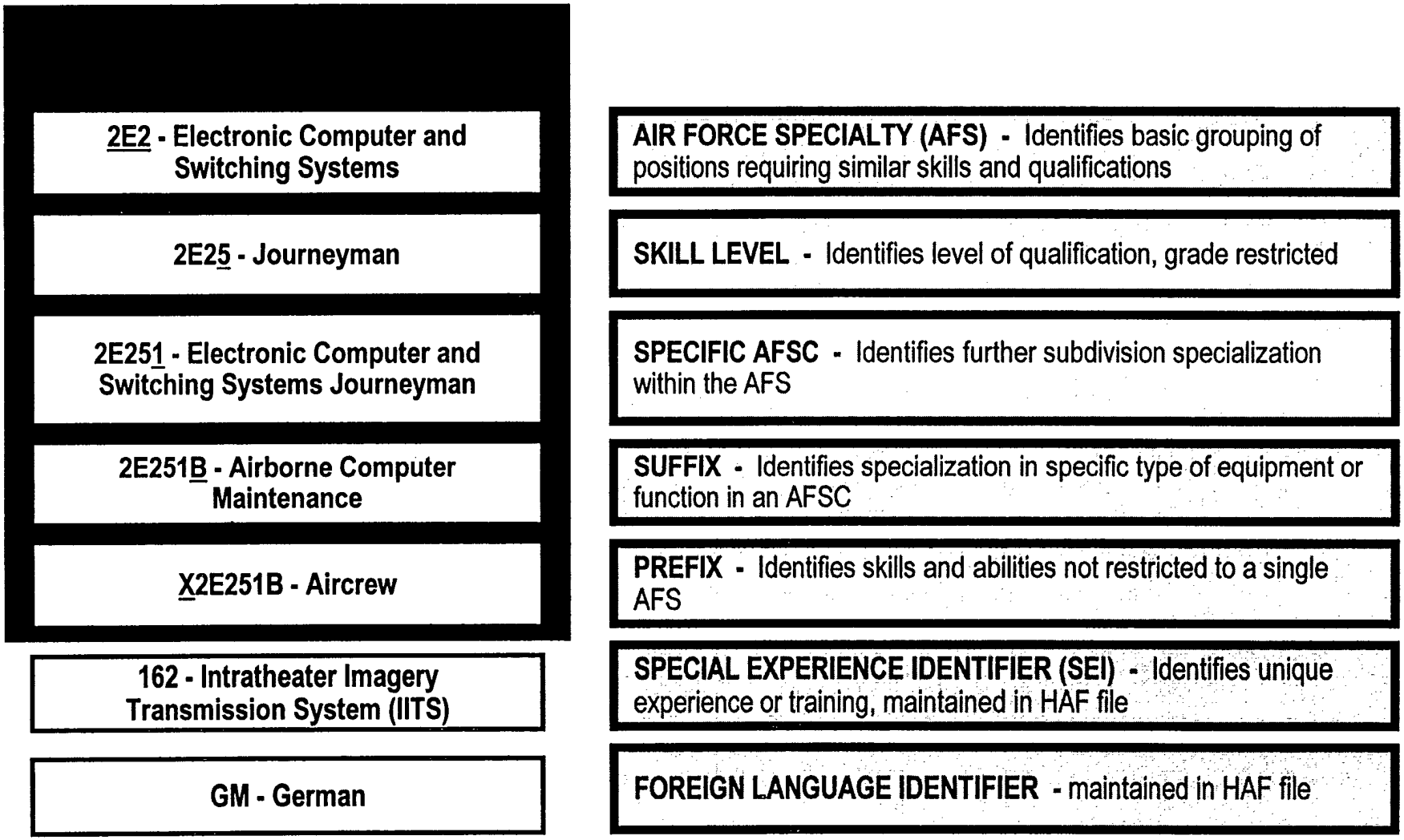
- Separate structures for Officers and Enlisted
- AFSC (Air Force Specialty Code) identifies position requirements and personnel skills
- Additional coding systems used to identify skills, abilities, and functions
  - SDI (Special Duty Identifier)
  - RI (Reporting Identifier)
  - SEI (Special Experience Identifier)
  - Foreign Language

Air Force Occupational Structure for Enlisted Personnel

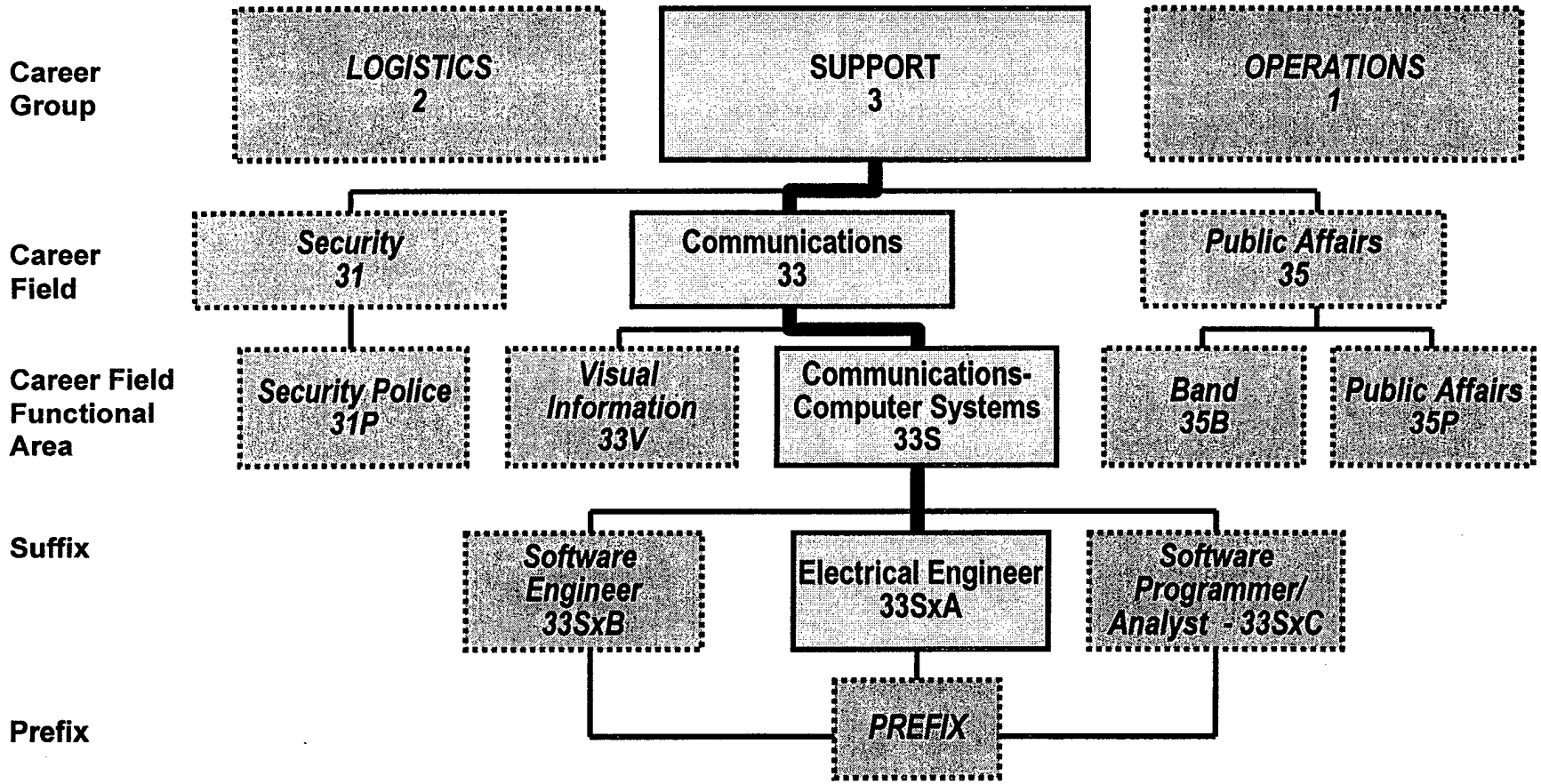


Appendix A-1

Air Force Enlisted Occupational Code

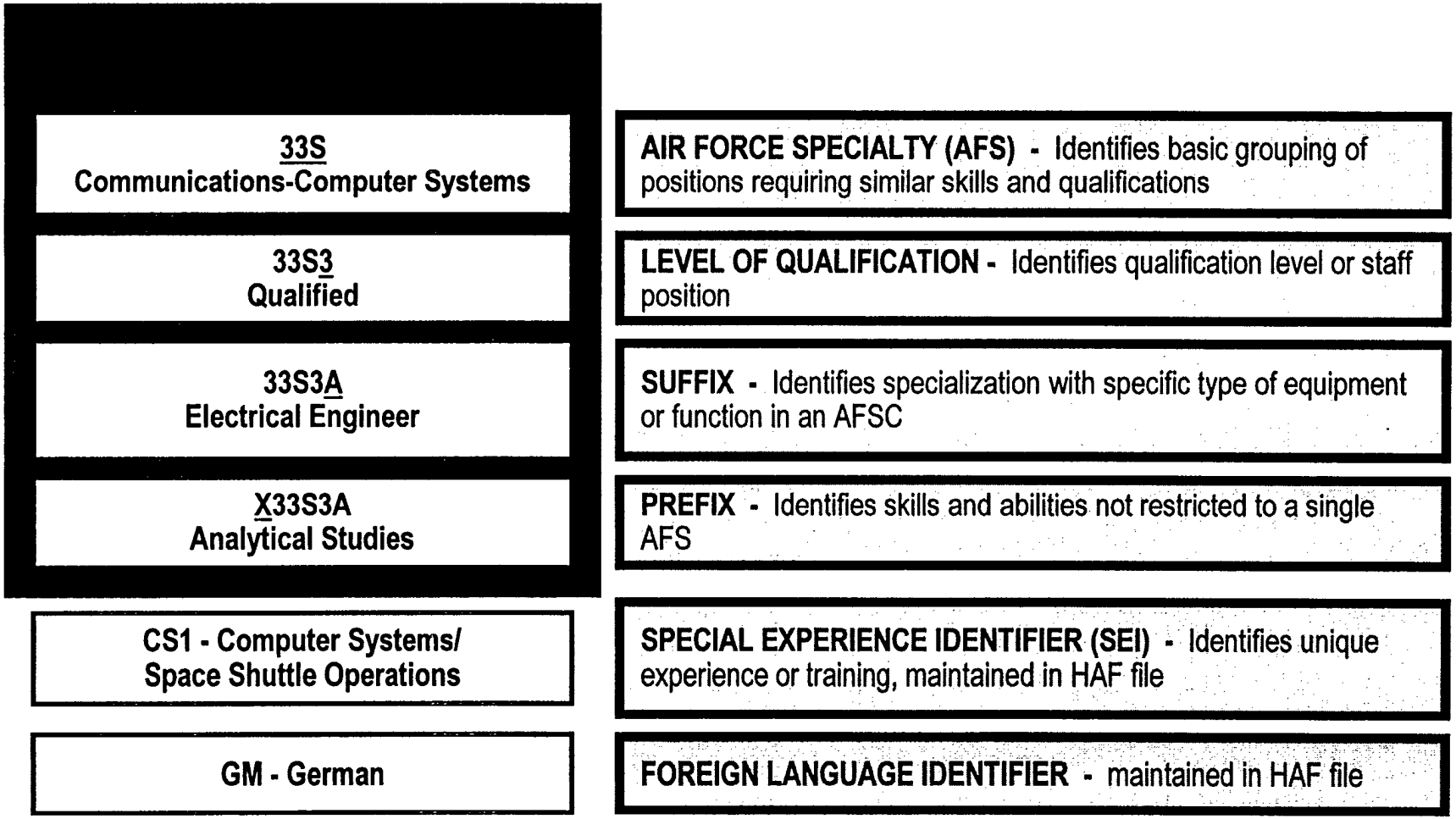


Air Force Occupational Structure for Officer Personnel



Appendix A-1

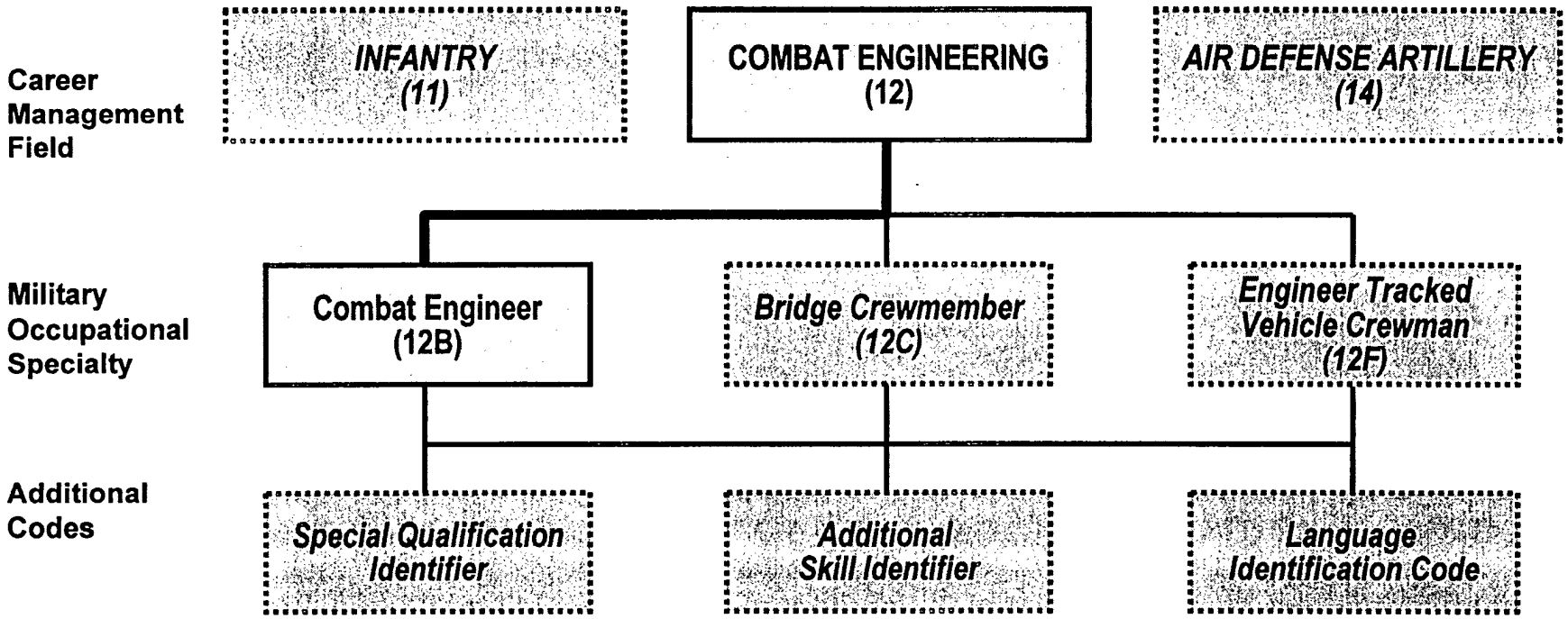
Air Force Officer Occupational Code



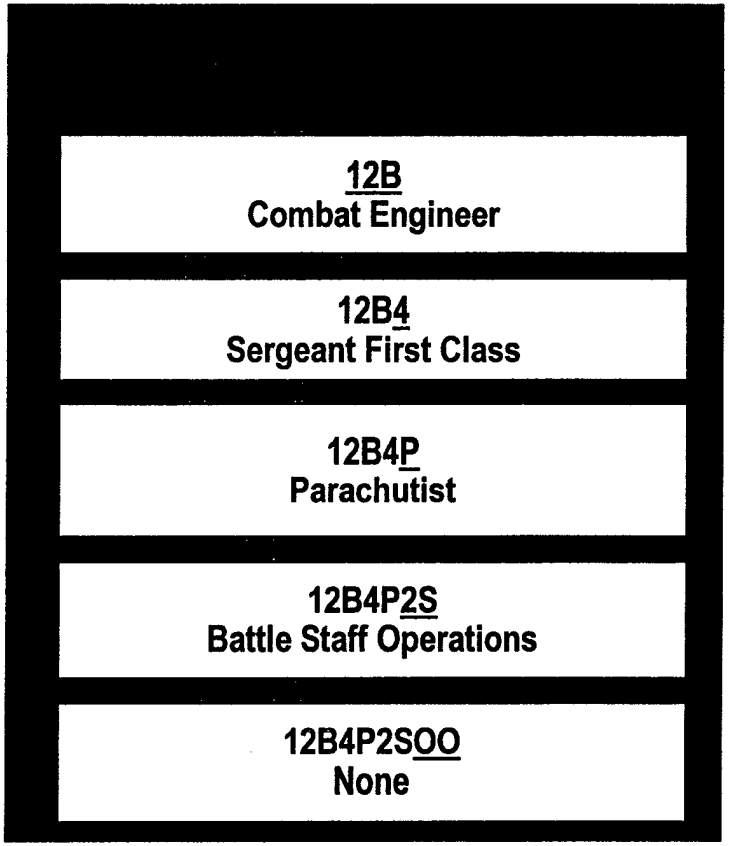
Army Occupational Classification Structure

- **Distinct classification systems for Enlisted, Commissioned Officer, and Warrant Officer**
- **Information provided on job duties, requirements, and primary skills associated with positions**

Army Occupational Structure for Enlisted Personnel



Army Enlisted Occupational Code



MILITARY OCCUPATIONAL SPECIALTY - Identifies group of duty positions requiring closely related skills

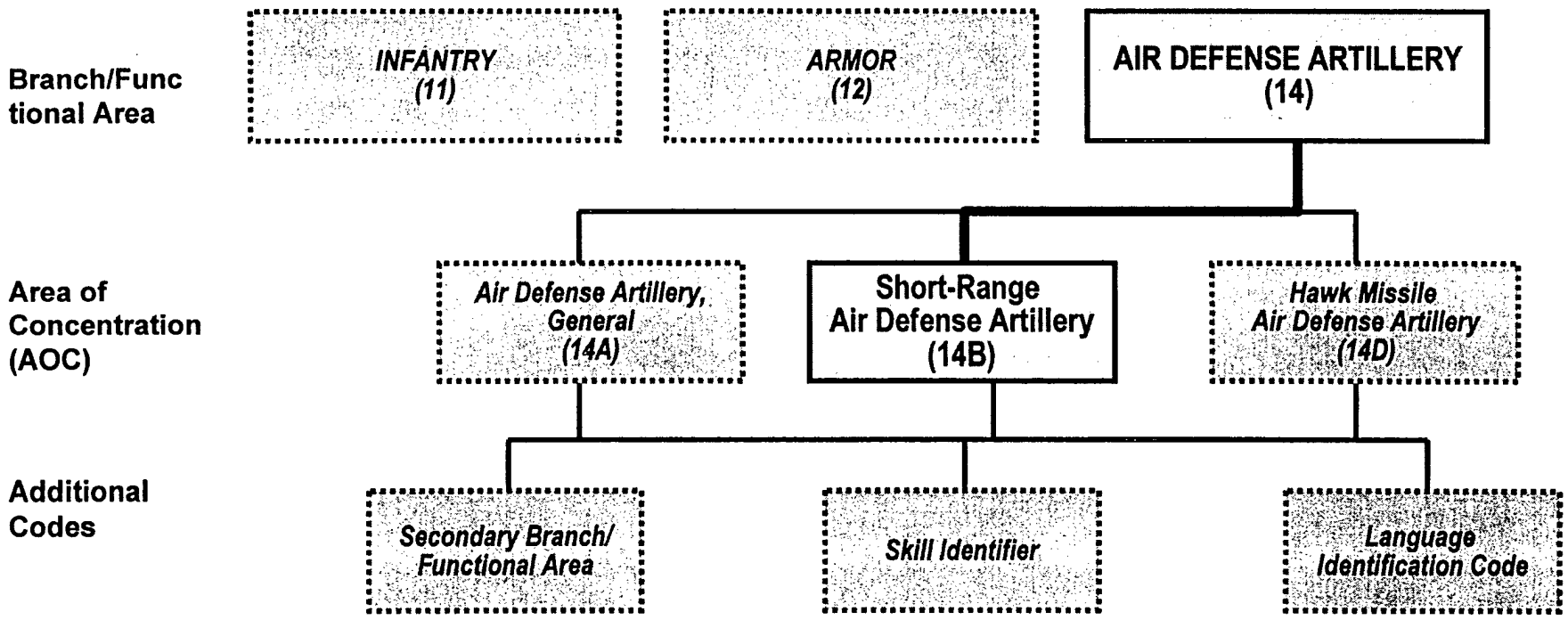
SKILL LEVEL - Indicates level of qualification in the MOS - directly related to grade

SPECIAL QUALIFICATIONS IDENTIFIER - Identifies specific, distinct requirements for positions in MOS

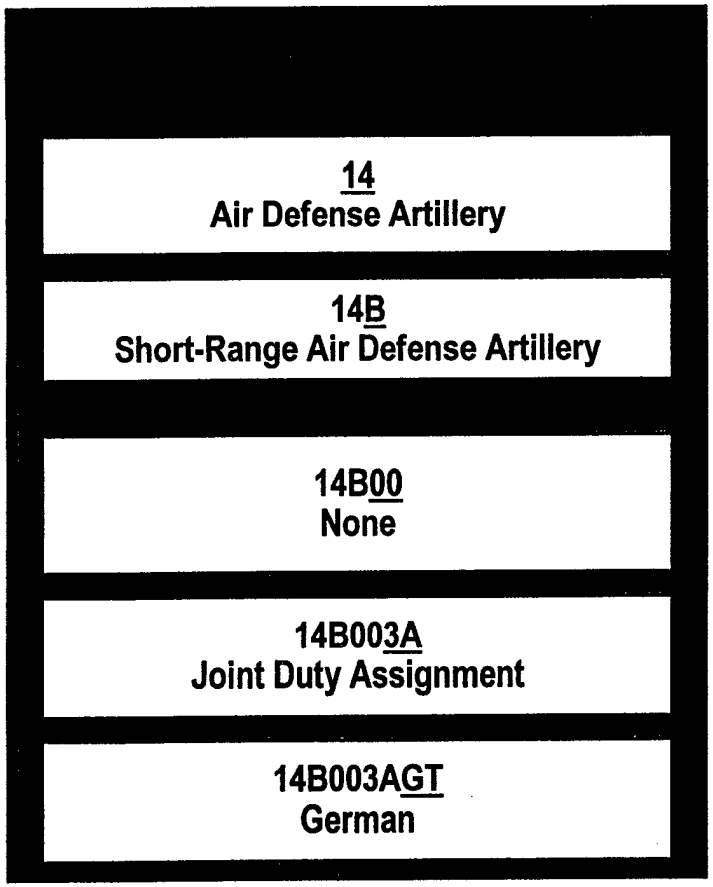
ADDITIONAL SKILL IDENTIFIER - Describes special skills in addition to those of the basic MOS

LANGUAGE IDENTIFICATION CODE - Indicates foreign language requirements or qualifications

Army Occupational Structure for Commissioned Officers



Army Commissioned Officers Occupational Code



AREA OF CONCENTRATION (AOC)

BRANCH/FUNCTIONAL AREA - Identifies branch or functional areas associated with primary job duties

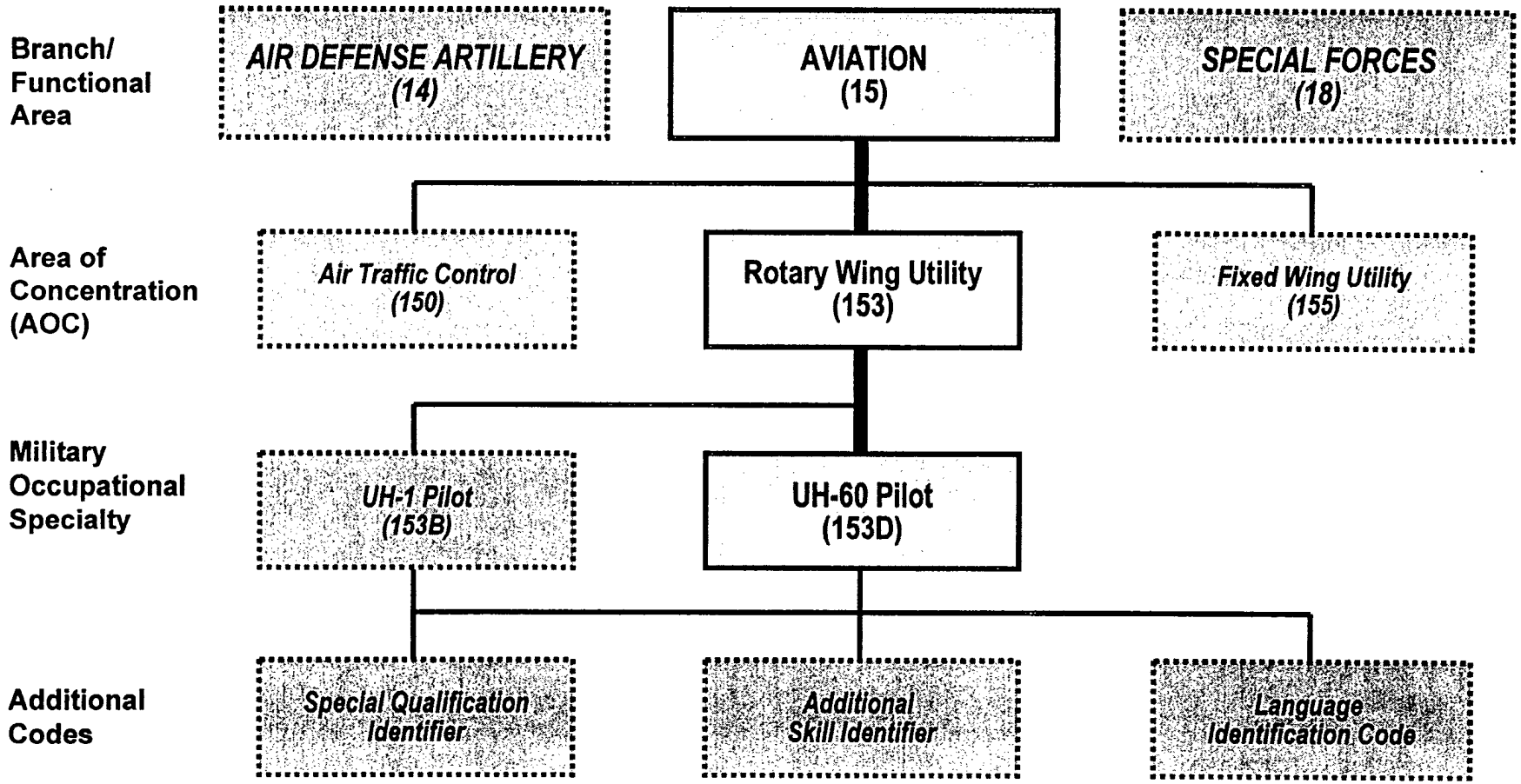
PRIMARY SKILL CODE - Identifies specific occupational skills within principal duties

SECONDARY BRANCH/FUNCTIONAL AREA - Denotes branch or functional area associated with secondary job duty

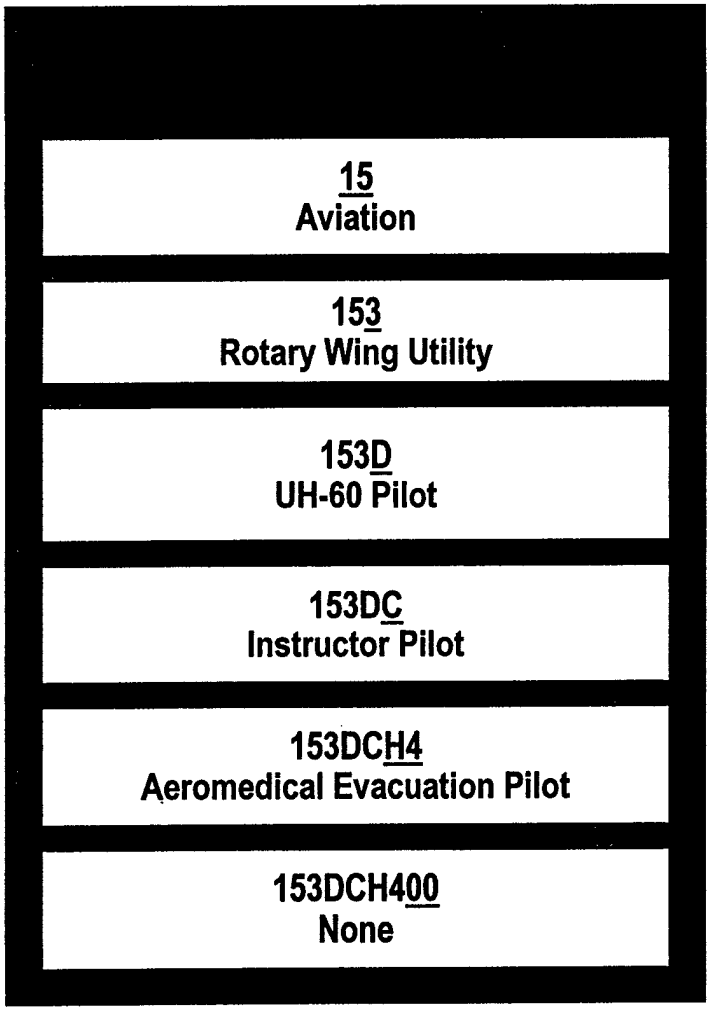
SKILL IDENTIFIER - Describes additional skills requirements of a position

LANGUAGE IDENTIFICATION CODE - Indicates foreign language requirements or qualifications

Army Occupational Structure for Warrant Officers



Army Warrant Officers Occupational Code



MILITARY OCCUPATIONAL SPECIALTY (MOS)

BRANCH/FUNCTIONAL AREA - Identifies branch or functional areas associated with primary job duties

AREA OF CONCENTRATION - Identifies specific occupational skills within principal duties

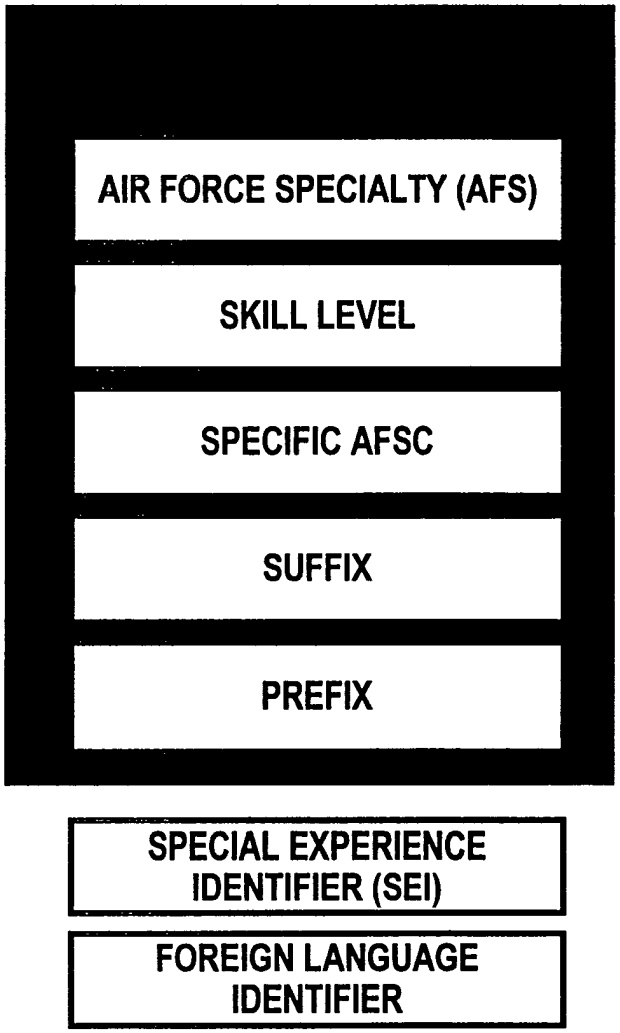
MILITARY OCCUPATIONAL SPECIALTY - Denotes separate qualifications in an AOC due to systems/skill differences

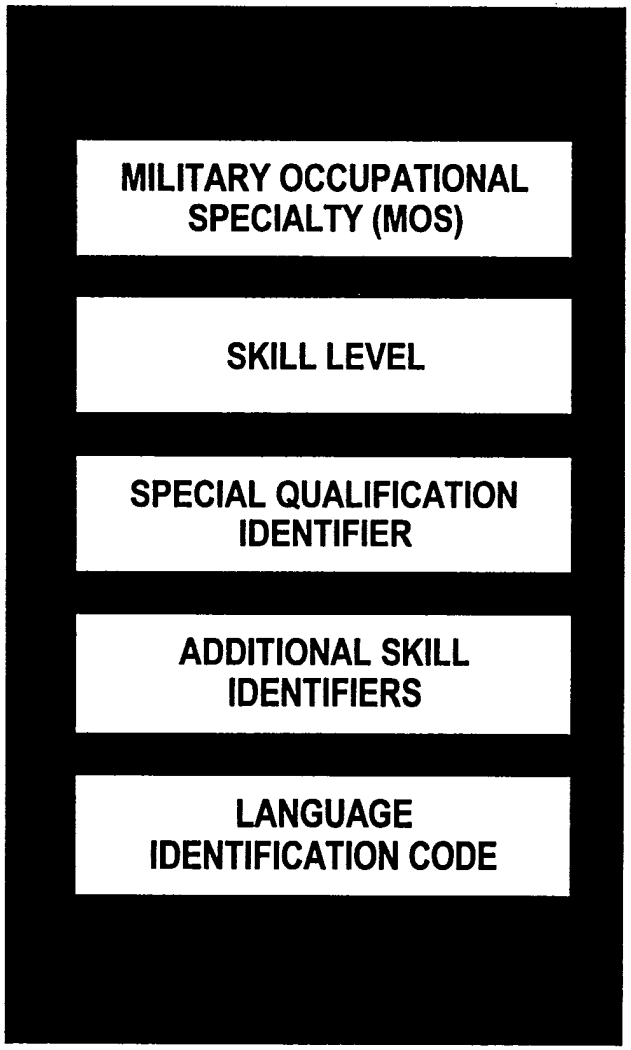
SPECIAL QUALIFICATIONS IDENTIFIER - Describes significant qualifications requiring formal or on-the-job training

ADDITIONAL SKILL IDENTIFIERS- Relates to a specific occupational skill or item of equipment

LANGUAGE IDENTIFICATION CODE - Indicates foreign language requirements or qualifications

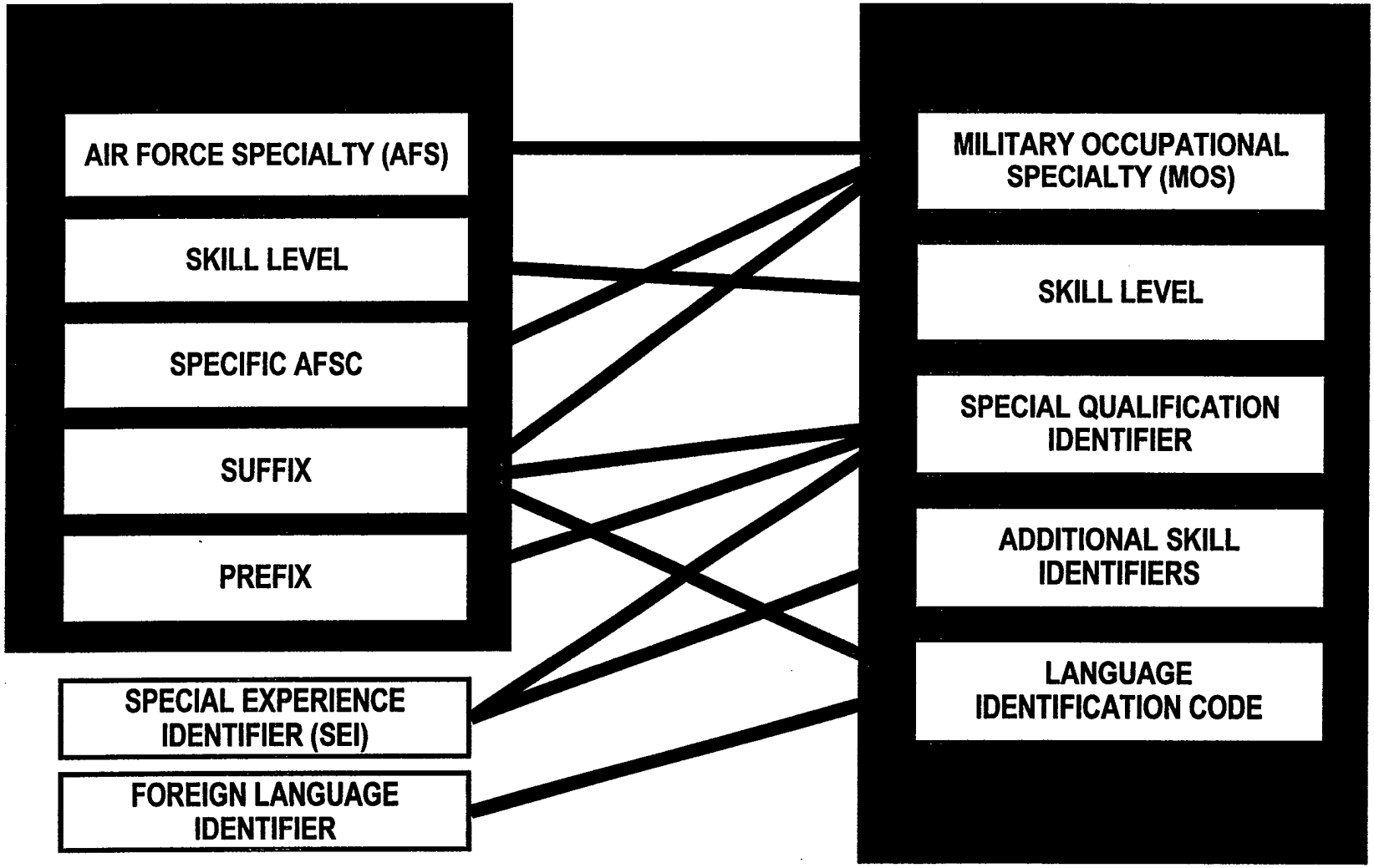
Comparing Air Force and Army Elements: Enlisted Positions





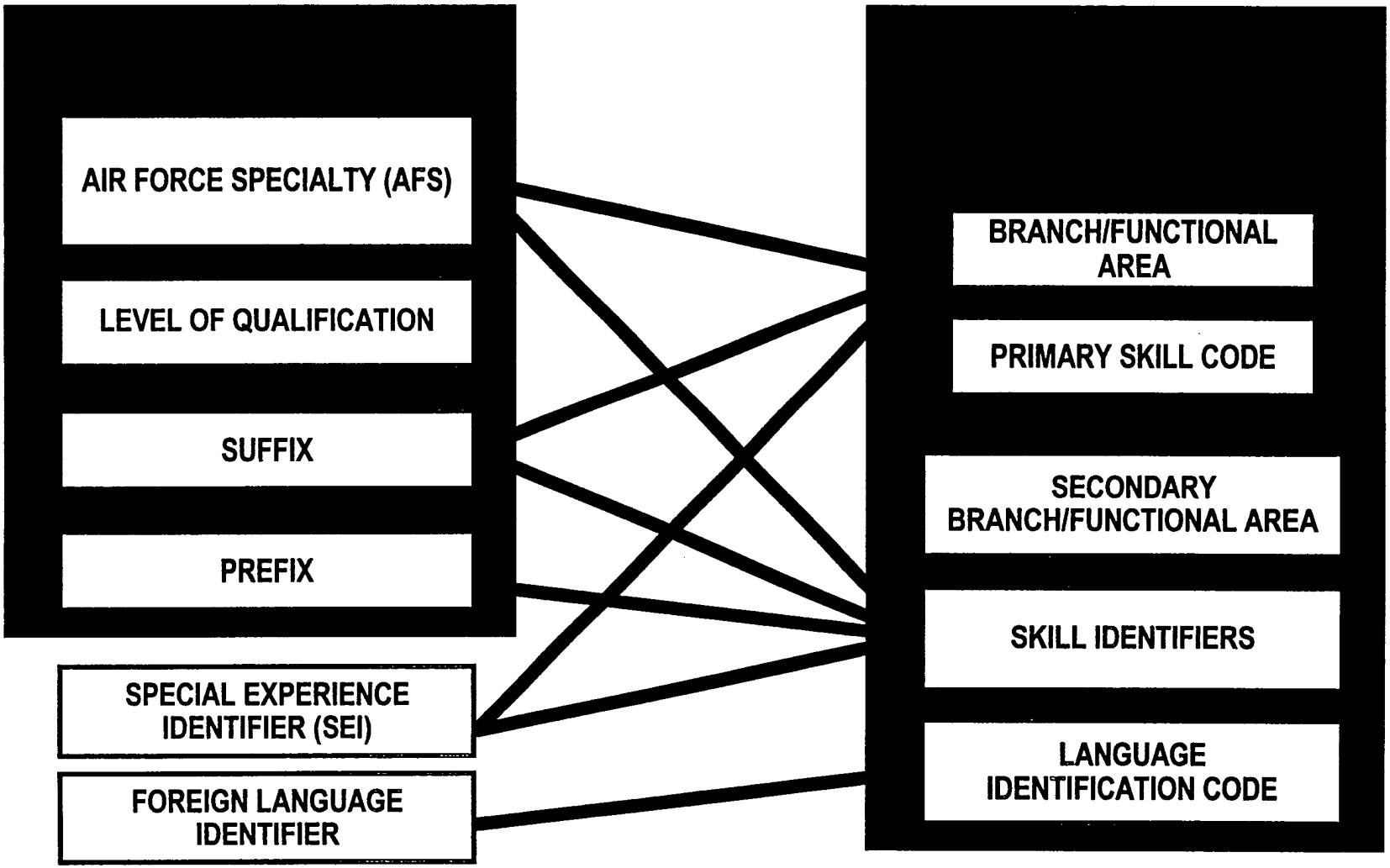
Appendix A-1

Comparing Air Force and Army Elements: Enlisted Positions



Appendix A-1

Comparing Air Force and Army Elements: Officer Positions



Appendix A-1

APPENDIX A-2
AIR FORCE - ARMY LINKAGE OCCUPATIONAL MATRIX

a. Army Commissioned Officer Data Links with Air Force
b. Warrant Officer Data
c. Enlisted Career Management Fields and MOS

Air Force - Army Linkage Occupational Matrix
Army Commissioned Officer Data: Links with Air Force

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Position Requirement Code	9 character code used to identify the occupational skills required to perform principle job duties AOC-FA-SI-LI AOC = FAP or AOC = IMC	11A00 5K 5S	Air Force Specialty Code (AFSC)	4 - 5 character code that indicates career field, occupational specialty, skill level and, where applicable, special skill requirements	11A1 Airlift pilot (Entry level/student)	**AFSC is the basic code, there may be additional codes that provide parallel information for 9-character Army code**
AOC code	Area of concentration (includes branch/ functional area and associated areas of expertise OR immaterial codes) *(3 characters, 2 numeric, 1 alpha)*	35B: Strategic Intelligence	Air Force specialty (without the skill level) May also relate, in some cases, to Air Force SEIs	Indicates career field, utilization field, and specialty	14NX: Intelligence	
Branch/ Functional Area/ Medical Functional Area (FA) Code (*Primary*)	Branch or functional area associated with primary job duty *(2 characters, numeric)*	35: Military Intelligence	Specialty Utilization Field	Group of related jobs	14: Intelligence	-Similar detail in these codes: many of the titles for Army Branch/ Functional area same as Air Force Utilization Field -For Army, this is the most general level, not for Air Force, but Air Force highest level (Career Groups) much more general than Army branch -Some discrepancies in level of detail (e.g., Army does not have a branch/ functional area for surgery, but Air Force does; Army has Branch Area of Judge Advocate, and that is Air Force AFSC

Appendix A-2

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Primary Skill Code (P)	Identifies special occupational skills within principal duty *(1 character, alpha)*	63E: Endodontist **OR** 61W: Peripheral Vascular Surgeon **OR** 55B: Military Judge	Career Field/ Functional Area OR Shredout **OR** SEI Experience Set	Specialized function within each utilization field: describes qualifications for specific jobs	47EX: Endodontist **OR** 45SXE: Surgeon, Peripheral Vascular **OR** JE: Military Judge	-Same level of detail between Army primary skill code and Air Force Functional Area, or specialty shredout - varying level of detail between two classification structures (e.g., have AOC that matches to shredout, and AOC that matches to AFSC without shredout)
No directly linked element			Qualification Level	Indicates skill level of position *(1 character, numeric)*	1 - Entry/ Student 2 - Qualified (only used occasionally) 3- Qualified 4 - Staff	- Army doesn't have a skill level associated with officer positions, but could compare using rank; only problem with this is that Air Force skill levels are not linked to rank. - How does the Army account for experience aside from rank?
Immaterial Codes (IMC)	Identifies the principle or secondary requirements when specific branch skills are not required. Includes branch immaterial, combat immaterial, and personnel immaterial. *(3 characters, 2 numeric, A)*	01A: Branch Immaterial Ex. of positions Community Commander	**RIs or SDIs** ***in a few cases***		RI: 91WO Wing Commander	Army branch immaterial codes are more general than Air Force Special Duty Identifiers *Limited usefulness*
Reporting Codes	Indicates reporting status, not position information	OOC - sick and in hospital ooB- General Officer	Reporting Identifiers (RIs)	Identifies positions that have not been identified with Air Force classification system	93P0- Patient 90G0 - General Officer	Will only use this in very rare cases (e.g., for Air Force nuclear weapons custodian, non-designated lawyer

Appendix A-2

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
No directly linked element			Special Duty Identifiers	Indicates performing group of tasks on semi-permanent or permanent basis, unrelated to specialty utilization field	80CO: Commander Cadet Squadron	* These may be linked to secondary branch/functional area codes
Branch/ Functional Area/ Medical Functional Area (FA) Code *(Secondary)*	Branch or functional area associated with secondary job duty. If primary code was a branch code, secondary must be a functional area code. If primary was a functional area code, secondary could be immaterial or branch code. Primary immaterial codes do not allow for secondary codes of any kind. *(2 characters, numeric)*	11	**No directly linked element**			
Skill Identifiers (SI)	Additional skill requirements of a position and additional skills in which commissioned officers are classified *(2 characters, 1 numeric, 1 alpha)*	5K	Special Experience Identifiers **OR** Specialty Shredouts or Suffix **OR** Specialty Qualifications in each AFSC description **OR** Prefixes			See detailed information described later
Language Identification Codes (LIC)	Designated foreign language requirements of a position and officer's qualification in the language	5S	**No directly linked elements**			-Air Force shredouts do not indicate specific languages, nor do SEIs -There is a separate Air Force document that identifies language codes: HAF file

Appendix A-2

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Branch/ Functional Proponent	The designated proponent assigned primary responsibility for the establishment of qualification criteria and career development patterns within the specific occupational career field.	Infantry School	**No directly linked element in on-hand publications**			**Should look at:** **- Formal schools catalogue** **- AFM 36-2101 (describes development of the classification manuals)**
Branch/ Functional Area Description	Indicates briefly the scope and distinguishing characteristics of the branch or functional area	"Provides the commander with all-source intelligence assessments and..."	General Utilization Field Introduction	Describes duties and responsibilities that are common to all specialties within the field	"...encompasses all functions performed by rated pilot officers to conduct or directly support flying operations..."	- Air Force description includes general information for future classification for that utilization field - Army presents general task statements
Branch/ Functional Area Qualifications	Qualifications for entry and promotion in all branches and functional areas	" A favorable special background investigation..."	Included in utilization field introduction	Describes general qualifications for utilization field	"Current aeronautical rating and qualification for aviation service according to AFI 11-402..."	
Area of Concentration Title/ Description	General description of tasks, required ksas, etc. associated with AOC (more specific case of branch/functional area)	p. 18	Specialty Summary and Duties and Responsibilities	General description of duties, and a numbered list of major duties	p. 116	
Special Qualifications	Statement of skills, education, training, experience, security, etc. not covered by duty description. Includes only essential qualifications for *all* positions within AOC.	Must have completed the Infantry Officer Basic Course and/or...	Specialty Qualifications	Includes: • Knowledge • Education • Training • Experience	p. 116	- Air Force is more specific about types of degrees required - Air Force describes knowledge and experience requirements, Army does not

Appendix A-2

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Special grading of positions	Designates positions within the AOC which require special grading exception and can't be graded under usual standards	The Recon Platoon Leader in a Ranger Regiment will be graded Captain.	Special Grading of Positions	Identifies cases where an individual must be a certain rank before obtaining the position		- we can use this as additional information in the decision making process for comparison purposes
Unique duty positions	Examples of duty positions appropriate and unique for the AOC, intended as a guide to selecting titles in authorization documents	Counterfire Staff Officer	SEI **OR** Shredouts **OR** Career Functional Area			- we can use this information to evaluate matches, but unique duty positions is not a definitive list, and should only be used as additional information in the decision making process
Examples of related civilian occupations	Listing of DOT codes and titles	DOT Code: 059.167-010, DOT Title: Intelligence Research Specialist	DOT Code	Listing of DOT codes and titles		- easy access to this information, can use as validation of linkages
Skill Identifier: code & title	Additional skill requirements of a position and additional skills in which commissioned officers are classified *(2 characters, 1 numeric, 1 alpha)*	Instructor (5K)	SEI **OR** Prefix **OR** AFSC Career Field Functional Area **OR** Shredouts			**In some cases, the types of skills described in the SEI are similar to the skills in the Army's Skill Identifiers). In other cases, skill identifiers are more comparable to other aspects of Air Force classification (e.g., Prefix, Functional Area, Shredout) The match will ultimately depend on equivalent comparisons.**

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Skill Identifier Description	Descriptive summary of scope and distinguishing characteristics of skill, made up of: • Description of positions • Qualification for award to officer • Restrictions	See examples of breakdowns below				
Description of positions	Identifies the scope and specific duties of the skill	"... subject matter experts and doctrine writers within training and training development	SEI activity definition (p. 296) **OR** Prefix explanation **OR** AFSC descriptions			
Qualifications for award to officer	Required education, training, or other special qualifications an officer must meet for the skill	Individuals must have graduated from both the Instructor Training and Systems Approach to Training course.	SEI experience set explanations **OR** Prefix description **OR** Specialty qualifications under AFSC description (?) **OR** Shredout definitions			
Restrictions	Any restrictions with which the skill may or may not be used (e.g., only for a certain AOC).	The skill is restricted under AR 611-75.	**No direct linking element: Air Force doesn't restrict prefixes or SEIs for officers**			

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Skill Identifier			SEI codes	Three letter code: first letter indicates general activity (alpha) codes, followed by experience sets codes (*alpha and/or numeric*); there are 46,000 possible permutations	Can't identify specific SEIs based on available information: since there are so many different combinations possible	-Both codes attempt to capture info. on qualifications of officers, based on experience and/or training - Few places where the actual title is the same, different structure, but attempting to measure same thing -in some cases Army SI matches with Activity code, in other cases with Exp. set
Skill Identifier descriptions		6Z: Strategist "identifies strategic operational planning positions on Army joint, and combined staffs."	SEI activity definition	Describes responsibilities of officers within the activity code	S: Strategic Analysis "... officers who are involved in long-range planning and analysis for future Air Force operational force structures."	-slightly different level of detail

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Skill Identifier qualifications		8A: Intensive Care "Army Nurse Corps officers who have... 1 Knowledge and skills verification process 2 Recommendation by current immediate rate 3 various courses	Experience Set explanations	Describes requirements for being in the Exp. Set	FB: Special Care Unit "Requires 12 consecutive months' experience in a Special Care Unit.. designated for the intensive nursing care... Requires recommendation by immediate supervisor and approval of Chief Nurse"	
Skill Identifiers		5P: Parachutist	Occupational Prefix	Identifies significant skills not restricted to a single AFSC *(1 character, alpha)*	J: Parachutist	
Skill Identifier descriptions/ qualifications	Describes positions, qualifications, restrictions of skill	"...positions requiring assignment of personnel with a current parachutist rating and are physically qualified for parachutist duty"	Prefix definition/explanation	Describes the functional expertise of the positions, and describes qualifications that an officer must have to be awarded the prefix - some include prerequisites	".. serving in, or qualified to serve in, positions requiring parachutist qualifications Prerequisites include: -completion of parachutist training -physical qualification -parachute rating	

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Skill Identifier		8D: Midwifery	AFSC, Career Field Functional Area	Specialized function within each utilization field	46GX: Nurse-Midwife	
Skill Identifier descriptions		"Identifies positions which require nurses qualified to practice midwifery."	Specialty Summary		"Manages and cares for selected patients throughout the maternity cycle, ..."	
Skill identifier qualifications		"Requires graduation from an accredited midwifery course and current certification in midwifery by the American College of Nurse-Midwives"	Specialty Qualifications for AFSC	Identifies specific qualifications for the AFSC	"Education: -For entry into this specialty, graduation from an accredited school of nursing... -For award of AFSC 46G3, completion of an approved course in nurse-midwifery..."	In some cases, AFSC specificity corresponds to Skill Identifiers, in others, it's the shredout
Skill Identifier		8T: Blood Banking	Specialty Shredout	Suffix at end of AFSC which indicates additional specialization within AFSC	43TXE: Biomedical Laboratory: Blood Bank	
Skill Identifier description		"... responsible for the supervision, training and investigational programs of AMEDD blood banks."	Specialty Shredout explanation	Describes responsibilities and qualifications for shredouts	"Performs and supervises blood bank activities, including ..."	- Specific descriptions not available for most shredouts

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Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Skill Identifier qualifications		"Requires completion of an approved fellowship in blood banking or equivalent experience for MSC officers."	Specialty Shredout explanation	Describes responsibilities and qualifications for shredouts	"Master's degree in immunohematology, clinical pathology specializing in ... or equivalent experience acceptable to the Surgeon General."	-Qualifications not available for most shredouts"
Skill Proponent	Designated proponent for the skill.	HQ TRADOC	some SEIs indicate a proponent/ decision-making authority Prefixes are locally established			
Degree of Proficiency	Designation given to certain medical officers based on formal training and professional experience qualifications (e.g., Dentist)	???	SEIs **OR** Prefixes			-Both describe qualifications in terms of experience and formal training -Match depends on equivalent levels of detail

Air Force - Army Linkage Occupational Matrix
Army Warrant Officer Data

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Grade Level of Position	Describes if Warrant Officer is entry(CW2), advanced(CW3), senior (CW4),or master (CW5)level WO = W1 & W2 SW = W3 & W4 MW = W5	CW2	**Air Force Officer or Enlisted Taxonomy, depending on specific job**			
MOSC Code	9 characters, minimum of five, describes military occupational specialty	153DC H4 B1				
Branch/ Functional Area	Branch or functional area associated with primary job duties *(2 characters, numeric)*	15: Aviation				
Area of Concentration	Concentration of MOSs within a specific branch or functional area which have closely related technical and tactical skill and training requirements *(1 character, numeric)*	153: Rotary Wing Utility				
Military Occupational Specialty	Designates separately definable qualifications within an AOC because of major systems or skill differences *(1 character, alpha)*	153D: UH-60 Pilot				
Special Qualification Identifier (SQI)	Designates significant qualifications which require, as a minimum, successful completion of a formal service school or at least 6 months on-the-job-training. "0" is put in this position when no special qualifications apply. The position title may reflect the SQI instead of the generic MOS title. *(1 character, numeric or alpha)*	153DC: UH-60 Instructor Pilot				

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Additional Skill Identifier (ASI)	Relates to a specific occupational skill or item of equipment for MOSC. Can be found in the 6th and 7th position of the MOSC, and in the 8th and 9th. (*2 characters, numeric/alpha or alpha/numeric*)	153DC H4 B1: UH-60 Instructor Pilot, Aeromedical qualified, and UH-1 qualified				
Language Identification Code	Authorized code to identify language skills; sometimes found in the 8th and 9th positions instead of ASI (*2 characters, alpha)*					
Chapter 5 Information						
Branch/Functional Area Description	Title and brief description of branch/functional area responsibilities	Branch 15 - Aviation "Encompasses operational flying and nonoperational flying warrant officer positions..."				
Area of Concentration Description	Code, title, description of AOC - one level of detail underneath branch/ functional area	AOC 153 - Rotary Wing Utility/Observation "Pilots and commands helicopters under tactical and nontactical conditions. Operates aircraft during..."				
Military Occupational Specialties	Under each AOC description is a list of MOSs for that AOC	153A - Rotary Wing Aviator 153B - UH-1 Pilot				
DOT codes	Related DOT codes for the AOC; jobs listed in the DOT with similar duties, requirements, etc.	196.163-010 - Flight Operations Inspector				

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Federal Civil Service Classification	Describes code and title of related federal civilian job series	GS 2181 - Aircraft Operation				
Prerequisites	Not sure: this could be related to training requirements, or previous job requirements	each MOS refers to DA Cir 601 series				
Associated SQI	Presents a list of associated special qualifications for this AOC: some apply only to specific MOSs within the AOC	0 - No special qualifications 7 - Parachutist 8 - Instructor				
Associated ASI	Presents list of associated additional skills associated with AOC; some may not apply to all MOSs within the AOC	6P- Master Fitness Trainer A1- OH-58A/C Observation Pilot (not for use with 153C)				
Qualifications	Describes qualifications for Warrant Officer, Senior Warrant Officer, and Master Warrant Officer	Warrant Officer must - *(a)* Be a U.S. citizen. Qualify for a security clearance of SECRET *(b)* Medical. (1) Initially meet the requirements of a medical examination for classifying as prescribed by AR 40-501				
Duties	Describes job duties of Warrant Officer, Senior Warrant Officer, and Master Warrant Officer	Warrant Officer - *(a)* Knows capabilities and limitations of assigned aircraft. *(b)* Plans flights, ascertains factors such as load, weight, fuel supply				

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Rank coding and position titles	Tables which list various position codes and descriptions for each MOS, by Warrant Officer, Senior Warrant Officer, and Master Warrant Officer	Columns in table: • Grade • Unit Description (??) • Section Description • MOS Code • Position Description				
Standards of grade factors	List of factors that can be used to determine rank group codes for positions not included in Chapter 5	• Similar organizations • Requisite experience level • Skill type • Skill level • Criticality to organizational mission • Skills and knowledge required				
Position Descriptions	See below for detail	**We don't have these on-hand**				
Position name and title	Name of job, and title					
Introduction	Describes functions of the organizational unit in which position is located, and purpose of position					
Major duties and responsibilities	Brief description of major duties, which must:: • be a determinant of qualification requirement for assignment to the position OR • occupy a significant amount of the individual's time • Listed in descending order of importance, and includes an estimate of percentage of time.					

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Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Supervision of others	Describes any supervisory responsibilities of the position, showing clearly the nature and extent of supervision					
Controls over the position	• Identification of the supervisor of the position by title, grade, unit • Description of the nature of supervision provided					
Qualification requirements of position	Describes the KSAs needed to perform official duties, in terms of intensity, complexity, diversity					

Air Force - Army Linkage Occupational Matrix
Enlisted Career Management Fields and MOS

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
MOSC	9 characters, describes detailed information about occupations					
MOS	Identifies a group of duty positions that require closely related skills, soldier should be able to perform all duty positions in the same MOS at the same skill level *(3 characters, 2 numeric, 1 alpha)*	91Q: Pharmacy Specialist **OR** 02J: Clarinet Player	AFSC w/o skill level **OR** Shredout	Basic grouping of positions requiring similar skills and qualifications **OR** Identifies specialization in a specific type of equipment or function	4P0: Pharmacy **OR** 3N1X1A: Regional Band, Clarinet	- No good matches between SEI and MOS - Some similar titles between AFSC and MOS -Level of detail differs depending on career field
Skill and grade level	Level of qualification in the total MOS, directly related to grade	0 = Initial entry MOS training 1 = PFC and SPC 2 = SGT 3 = SSG 4 = SFC 5 = MSG and SGM	AFSC skill level	Indicates approximate skill level and experience in AFSC	1 - Helper 3 - Apprentice (E1 - E3) 5 - Journeyman (E4 - E5) 7 - Craftsman (E6 - E7) 9 - Superintendent (E8) 0 - Chief Enlisted Manager (E9)	- Army has set linkages between skill level and grade, but Air Force is not set -Need to identify approximate links between Air Force skill level and rank
Special Qualifications Identifier (SQI)	Identifies special requirements of an MOS. SQI is distinct from MOS and must be applicable to a minimum of 20 positions. May indicate the necessity of completing a formal course. May be used with any MOS and skill level. *(1 character, alpha or numeric)*	P = Parachutist H = Instructor **OR** 4 = Non-career recruiter H = Instructor **OR** N = Joint Planner	Prefix **OR** Special Duty Identifiers (SDI) **OR** SEI	-Prefix not associated with any specific MOS -Positions not clearly within a specific career field -Special training and experience not otherwise reflected in classification system but connected to specific AFSCs	J = Parachutist K = Aircrew Instructor **OR** 8R000 = Recruiter 8B000 = Military Training Instructor **OR** 048 = Joint Operations Planning System Automated Data Processing User	- Prefix match, similar level of detail, neither linked to specific MOS/AFSC -SDI match, similar level of detail, not linked to specific MOS/AFSC -SEI match effective for very specific SQIs

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Additional Skill Identifiers (ASI)	Identifies special skills related to, but in addition to, those in the basic MOS - authorized for use with only certain MOS' - includes use of specific systems, security requirements, etc. *(2 characters, alpha and numeric, in either order)*	A9 - Patrol Dog Handling H6 - Data Analyst (TEMPEST)	SEI	Specialized training and experience otherwise not classified	310 - Patrol Dog, Drug Detection 370- Patrol Dog, Explosive Detection 175 - TEMPEST technician	-similar titles, descriptions -SEIs are more specific and detailed than ASIs
ASI Y1 - Transition	Identifies personnel who have completed transition-type training on late models of existing equipment		**No directly linking element**			
ASI Y2 - Transition	Identifies personnel who require transition-type training because of specialty conversion or need to complete MOS training	Lists MOS whose personnel require training	**No directly linking element**			
Foreign Language requirements	Two characters (*alpha*) that indicate foreign language requirements and qualifications: same as officer codes	00: None required	AFSC shredouts, *for Cryptologic Linguist AFSC only*		1N3X2A: Romance Cryptologic Linguist, Spanish	
Career Management Field	Groupings of related MOSs that form the basis for enlisted occupational classification. Describes career progression patterns, grade-skill relationships, consolidated MOSs at higher grades, loss and gain information.	CMF 96 - Military Intelligence **OR** CMF 98 - Signals Intelligence **OR** CMF 91 - Medical	Career Field **OR** AFSC **OR** Highest Level Grouping		1N - Intelligence **OR** 1N2: Signals Intelligence Production **OR** 4 - Medical	- For enlisted Army, first two digits of MOS aren't always the same as CMF -Match will depend on specific occupations for matching
MOS Specs Chap 2						
MOS breakdown	For some CMF (where first 2 digits of MOS differ from CMF #), lists titles and MOS codes for specific occupations		Specialty Codes **OR** Shredouts			
Title and MOS designation	Short summary of the full scope of the specialty: not listed for each MOS			Short description of the AFSC (or the SDI)		

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Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Major Duties	Summary of major duties performed and significant skill level tasks (must be able to perform all tasks below current skill level)	91Q: Pharmacy Specialist Major duties: ...prepares, controls, and issues pharmaceutical products under the supervision of a pharmacist or physician,..."	Specialty Summary **OR** AFSC Duties and Responsibilities	Short description of major duties of AFSC **OR** Detailed list of duties for each AFSC **(more detailed than average Army description)**	4P0: Pharmacy Specialty Summary: Manages administrative and technical pharmacy activities. Requisitions, stocks, compounds, and dispenses pharmaceuticals..."	-Main difference between the 2: Army describes job duties for each skill level, Air Force describes one set of job duties, but different quals for each skill level
Physical demands analysis and ratings	Indicates relative physical work requirements of each MOS performed in combat environment		Additional Mandatory Requirements for AFSC Entry: Attachment 41	Chart that lists physical and aptitude requirements for entry into each AFSC		

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
MOS physical demands	Refers to upper body strength, ranges from light to very heavy, uses DOL categories	1) Light - lift on an occasional basis a max. of 20 lbs with frequent/ constant lifting of 10 lbs. 2) Medium - lift on occasional basis a max. of 50 lbs. with frequent or constant lifting of 25 lbs. 3) Moderately heavy - Lift on occasional basis 80 lbs. with frequent or constant lifting of 40 lbs. 4) Heavy - Lift on an occasional basis a max. of 100 lbs with frequent/constant lifting of 50 lbs. 5) Very heavy - Lift on an occasional basis over 100 lbs. and frequent or constant lifting in excess of 50 lbs.	Strength Aptitude Code in Attachment 41	Describes the weight a candidate must be able to lift to qualify for AFSC. Letter code is attached to each AFSC	"demonstrated by weight lift of..." E- Unknown F - < 40 lbs. G - 40 lbs. H - 50 lbs. J - 60 lbs. K - 70 lbs. L - 80 lbs. M - 90 lbs. N - 100 lbs. P - 110 lbs.	Slightly different concept because Army specifically applies to a position, and links tasks to rating, but Air Force requires an individual to meet the prerequisite
Physical profile serial (PULHES)	Classification of physical abilities required on job in terms of 6 factors	P = Physical capacity or stamina U = Upper extremities L = Lower extremities H = Hearing and ear E = Eyes S = Psychiatric	PULHES requirements described in Attachment 41			
Qualifications for initial award of MOS	Indicates basic criteria, including training requirements, for award into MOS.					

Army Data Element	Definition	Example	Air Force Data Element	Definition	Example	Rationale for Linkage
Aptitude Scores	When applicable, lists minimum score on specific aptitude test/dimension	"A minimum score of 95 in aptitude area ST"	Attach. 41	Chart which identifies a minimum score on 4 dimensions of the ASVAB (MAGE) for each AFSC		Test score dimensions reflected are different: need to determine if parallel before match is made
Formal training	Course of instruction prepared/or approved by MOS proponent	42D: Dental Laboratory Specialist "completion of MOSC 42D10 course)... or meet civilian acquired skills criteria listed in AR 601-210."	AFSC Specialty Qualifications	Describes prerequisite knowledge, education, and experience for award to AFSC	Dental Lab: "completion of a basic dental laboratory course is mandatory.."	
Civilian acquired skills (CAS)	Skills acquired through attendance at vocational/technical or another recognized educational institution, verified by diploma/certificate					
Supervised OJT (SOJT)	Used as a last resort if formal training, correspondence course, vocational, etc. unavailable					
Standards of grade table	Typical duty position titles, grade and grading patterns for the MOS	Skills criteria listed in AR 601-210	**No equivalent Air Force linkage between skill level and grade**			

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APPENDIX A-3
AIR FORCE SPECIALTY CODES (AFSCs)

Air Force Specialty Codes
(E)nlisted and (O)fficer

Enlisted/ Officer	AFSC	AFSC title
E	1A0X1	In-Flight Refueling
E	1A1X1B	Flight Engineer, Helicopter
E	1A1X1C	Flight Engineer, Performance Qualified
E	1A2X1	Aircraft Loadmaster
E	1A3X1	Airborne Communications Systems
E	1A4X1	Airborne Warning Command and Control Systems
E	1A4X1D	Airborne Warning Command and Control Systems, Weapons Director
E	1A5X1	Airborne Missions Systems
E	1C0X1	Airfield Management
E	1C0X2	Operations Resource Management
E	1C1X1	Air Traffic Control
E	1C2X1	Combat Control
E	1C3X1	Command and Control
E	1C4X1	Tactical Air Command and Control
E	1C5X1	Aerospace Control and Warning Systems
E	1C5X1A	Aerospace Control and Warning Systems, Manual System
E	1C5X1B	Aerospace Control and Warning Systems, Sector Operations Control Center
E	1C5X1C	Aerospace Control and Warning Systems, Theater Air Control System
E	1C5X1D	Aerospace Control and Warning Systems, Weapons Director
E	1C6X1	Space Systems Operations
E	1N0X1	Intelligence, Applications
E	1N1X1	Imagery Interpreter
E	1N2X1	Signals Intelligence Production
E	1N3X1A	Germanic Cryptologic Linguist, GERMAN
E	1N3X1B	Germanic Cryptologic Linguist, DUTCH
E	1N3X1C	Germanic Cryptologic Linguist, FLEMISH
E	1N3X1D	Germanic Cryptologic Linguist, SWEDISH
E	1N3X1E	Germanic Cryptologic Linguist, AFRIKAANS
E	1N3X2A	Romance Cryptologic Linguist, SPANISH (LATIN AMERICAN)
E	1N3X2B	Romance Cryptologic Linguist, PORTUGUESE (LATIN AMERICAN)
E	1N3X2C	Romance Cryptologic Linguist, FRENCH
E	1N3X2D	Romance Cryptologic Linguist, ITALIAN
E	1N3X2E	Romance Cryptologic Linguist, ROMANIAN
E	1N3X2F	Romance Cryptologic Linguist, HAITIAN-CREOLE
E	1N3X2G	Romance Cryptologic Linguist, MOLODOVAN
E	1N3X3A	Slavic Cryptologic Linguist, RUSSIAN
E	1N3X3B	Slavic Cryptologic Linguist, POLISH
E	1N3X3C	Slavic Cryptologic Linguist, CZECH
E	1N3X3D	Slavic Cryptologic Linguist, SERBO-CROAT
E	1N3X3E	Slavic Cryptologic Linguist, RUSSIAN (WHITE)
E	1N3X3F	Slavic Cryptologic Linguist, HUNGARIAN
E	1N3X3G	Slavic Cryptologic Linguist, LITHUANIAN
E	1N3X3H	Slavic Cryptologic Linguist, SLOVENIAN
E	1N3X3J	Slavic Cryptologic Linguist, BULGARIAN
E	1N3X3K	Slavic Cryptologic Linguist, UKRAINIAN
E	1N3X3L	Slavic Cryptologic Linguist, MACEDONIAN
E	1N3X4A	Far East Cryptologic Linguist, CHINESE (MANDARIN)
E	1N3X4B	Far East Cryptologic Linguist, VIETNAMESE

E	1N3X4C	Far East Cryptologic Linguist, THAI
E	1N3X4D	Far East Cryptologic Linguist, CAMBODIAN
E	1N3X4E	Far East Cryptologic Linguist, LAO
E	1N3X4F	Far East Cryptologic Linguist, JAPANESE
E	1N3X4G	Far East Cryptologic Linguist, KOREAN
E	1N3X4H	Far East Cryptologic Linguist, CHINESE (CANTONESE)
E	1N3X4J	Far East Cryptologic Linguist, TAGALOG
E	1N3X5A	Mid East Cryptologic Linguist, ARABIC
E	1N3X5B	Mid East Cryptologic Linguist, ARABIC (SYRIAN)
E	1N3X5C	Mid East Cryptologic Linguist, HEBREW
E	1N3X5D	Mid East Cryptologic Linguist, PERSIAN
E	1N3X5E	Mid East Cryptologic Linguist, TURKISH
E	1N3X5F	Mid East Cryptologic Linguist, GREEK
E	1N3X5G	Mid East Cryptologic Linguist, INDONESIAN
E	1N3X5H	Mid East Cryptologic Linguist, HINDI and URDU
E	1N3X5J	Mid East Cryptologic Linguist, ARMENIAN
E	1N3X5K	Mid East Cryptologic Linguist, AZERI
E	1N3X5L	Mid East Cryptologic Linguist, PUSHTU
E	1N3X5M	Mid East Cryptologic Linguist, GEORGIAN
E	1N3X5N	Mid East Cryptologic Linguist, TADZHIK
E	1N3X5P	Mid East Cryptologic Linguist, KAZAKH
E	1N3X5Q	Mid East Cryptologic Linguist, TURKMEN
E	1N3X5R	Mid East Cryptologic Linguist, UZBEK
E	1N4X1	Signals Intelligence Analysis
E	1N5X1	Electronic Signals Intelligence Exploitation
E	1N6X1	Electronic System Security Assessment
E	1S0X1	Safety
E	1T0X1	Survival, Evasion, Resistance, and Escape Training
E	1T1X1	Aircrew Life Support
E	1T2X1	Pararescue
E	1W0X1	Weather
E	1W0X1A	Weather, Forecaster
E	2A0X1A	Avionic Test Station and Comp, F-15/F-111
E	2A0X1B	Avionic Test Station and Comp, F-16/F-117/A-10/B-1B
E	2A1X1	Avionic Sensors Maintenance
E	2A1X2	Avionics Guidance and Control Systems
E	2A1X3	Communication And Navigation Systems
E	2A1X4	Airborne Warning and Control Radar
E	2A1X5A	Avionic Support Equipment, F-4
E	2A1X5B	Avionic Support Equipment, C-5
E	2A1X7	Electronic Warfare Systems
E	2A3X1	F-15/F-111 Avionic Systems
E	2A3X1A	F-15/F-111 Avionic Systems, Attack Control
E	2A3X1B	F-15/F-111 Avionic Systems, Instrument and Flight Control
E	2A3X1C	F-15/F-111 Avionic Systems, Communication, Navigation, and Penetration Aids
E	2A3X2	F-16 Avionic Systems
E	2A3X2A	F-16 Avionic Systems, Attack Control
E	2A3X2B	F-16 Avionic Systems, Instrument and Flight Control
E	2A3X2C	F-16 Avionic Systems, Communication, Navigation, and Penetration Aids
E	2A3X3A	Tactical Aircraft Maintenance, F-15
E	2A3X3B	Tactical Aircraft Maintenance, F-16/F-117
E	2A3X3C	Tactical Aircraft Maintenance, F/EF-111
E	2A3X3D	Tactical Aircraft Maintenance, F-4
E	2A3X3E	Tactical Aircraft Maintenance, A-10

E	2A3X3F	Tactical Aircraft Maintenance, T-1/T-38
E	2A3X3G	Tactical Aircraft Maintenance, T-37, OA-37
E	2A3X3H	Tactical Aircraft Maintenance, U-2
E	2A3X3J	Tactical Aircraft Maintenance, General (Except F-15/F-16/F-117)
E	2A3X3Z	Tactical Aircraft Maintenance, All Other
E	2A4X1	Aircraft Guidance and Control
E	2A4X2	Aircraft Communication and Navigation Systems
E	2A4X3	Aircraft Command Control Communications and Navigation Systems
E	2A5X1	Aerospace Maintenance
E	2A5X1A	Aerospace Maintenance, C-9,20,21,22,141,T39,43
E	2A5X1B	Aerospace Maintenance, C-12,26,27,130
E	2A5X1C	Aerospace Maintenance, C-5
E	2A5X1D	Aerospace Maintenance, C-17
E	2A5X1E	Aerospace Maintenance, B-1, B-2
E	2A5X1F	Aerospace Maintenance, B-52
E	2A5X1G	Aerospace Maintenance, C-18, 135,E-3, VC-25,137
E	2A5X1H	Aerospace Maintenance, KC-10, E-4
E	2A5X1J	Aerospace Maintenance, C-5/C-9/C-12/C-17/C-20/C-21/C-22/C-26/C-27/C-130/C-141/T-39/T-43
E	2A5X1K	Aerospace Maintenance, B-1, B-2, B-52
E	2A5X1L	Aerospace Maintenance, C-18, 135,E-3,4,KC-10, VC-25,137
E	2A5X2	Helicopter Maintenance
E	2A5X2A	Helicopter Maintenance, MH-53
E	2A5X2B	Helicopter Maintenance, H-60
E	2A5X2C	Helicopter Maintenance, H-1
E	2A5X3A	Bomber Avionic Systems, Off AV SYS/CITS/OBTS/Doppler Radar Systems
E	2A5X3B	Bomber Avionic Systems, Inst and Flight Control Comp
E	2A5X3C	Bomber Avionic Systems, Comm/Nav/Def AV Sys
E	2A6X1A	Aerospace Propulsion, Jet Engines
E	2A6X1B	Aerospace Propulsion, Turboprop and Turboshaft
E	2A6X1C	Aerospace Propulsion, TF33 Jet Engines
E	2A6X1D	Aerospace Propulsion, F100 Jet Engines
E	2A6X1E	Aerospace Propulsion, F110 Jet Engines
E	2A6X2	Aerospace Ground Equipment
E	2A6X3	Aircrew Egress Systems
E	2A6X4	Aircraft Fuel Systems
E	2A6X5	Aircraft Hydraulic Systems
E	2A6X6	Aircraft Electrical and Environmental Systems
E	2A7X1	Aircraft Metals Technology
E	2A7X2	Nondestructive Inspection
E	2A7X3	Aircraft Structural Maintenance
E	2A7X4	Survival Equipment
E	2E0X1	Ground Radar Systems
E	2E1X1	Satellite And Wideband Communications Equipment
E	2E1X2	Meteorological and Navigation Systems
E	2E1X3	Ground Radio Communications
E	2E1X4	Television and Intrusion Detection Systems
E	2E2X1	Electronic Computer and Switching Systems
E	2E2X1A	Electronic Computer and Switching Systems, AN/TYQ-32(V)2 And AN/FYQ-93
E	2E2X1B	Electronic Computer and Switching Systems, Airborne Computer Maintenance
E	2E2X1C	Electronic Computer and Switching Systems, Strategic Communications Systems
E	2E3X1	Secure Communications Systems
E	2E4X1	Space Systems
E	2E5X1	Imagery Systems Maintenance

E	2E6X1	Communications And Antenna Systems
E	2E6X2	Communications Cable Systems
E	2E6X3	Telephone Systems
E	2E8X1	Instrumentation and Telemetry Systems
E	2F0X1	Fuels
E	2G0X1	Logistics Plans
E	2M0X0	Missile and Space Systems Maintenance
E	2M0X1	Missile and Space Systems Electronic Maintenance
E	2M0X1A	Missile and Space Systems Electronic Maintenance, ICBM
E	2M0X1B	Missile and Space Systems Electronic Maintenance, ALCM
E	2M0X2	Missile and Space Systems Maintenance
E	2M0X2A	Missile and Space Systems Maintenance, ICBM
E	2M0X3	Missile and Space Facilities
E	2M0X3A	Missile and Space Facilities, ICBM
E	2P0X1	Precision Measurement
E	2R0X1	Maintenance Data System Analysis
E	2R1X1	Maintenance Schedule
E	2S0X1	Supply Management
E	2S0X2	Supply Systems Analyst
E	2T0X1	Traffic Management
E	2T1X1	Vehicle Operations
E	2T2X1	Air Transportation
E	2T370	Special Purpose Vehicle and Equipment Maintenance
E	2T3X1	Special Purpose Vehicle and Equipment Repair
E	2T3X2A	Special Vehicle Maintenance, Firetrucks
E	2T3X2B	Special Vehicle Maintenance, Refueling Vehicles
E	2T3X3	Vehicle Maintenance Control and Analysis
E	2T470	General Purpose Vehicle and Body Maintenance
E	2T4X1	General Purpose Vehicle Mechanic
E	2T4X2	Vehicle Body Maintenance
E	2W0X1	Munitions Systems
E	2W1X1	Aircraft Armament Systems
E	2W1X1C	Aircraft Armament Systems, A-10
E	2W1X1D	Aircraft Armament Systems, F-4
E	2W1X1E	Aircraft Armament Systems, F-15
E	2W1X1F	Aircraft Armament Systems, F-16
E	2W1X1H	Aircraft Armament Systems, F-111
E	2W1X1K	Aircraft Armament Systems, B-52G/H
E	2W1X1L	Aircraft Armament Systems, B-1B
E	2W1X1Z	Aircraft Armament Systems, All Other
E	2W2X1	Nuclear Weapons
E	3A0X1	Information Management
E	3C0X1	Communications-Computer Systems Operations
E	3C0X2	Communications-Computer Systems Programming
E	3C1X1	Radio Communications Systems
E	3C1X2	Electromagnetic Spectrum Management
E	3C2X1	Communications-Computer Systems Control
E	3C3X1	Communications-Computer System Planning and Implementation
E	3E0X1	Electrical Systems
E	3E0X2	Electric Power Production
E	3E1X1	Heating, Ventilation, Air Conditioning, and Refrigeration
E	3E2X1	Pavements And Construction Equipment
E	3E3X1	Structural
E	3E4X1	Utilities Systems

E	3E4X2	Liquid Fuel Systems Maintenance
E	3E4X3	Environmental
E	3E5X1	Engineering
E	3E6X1	Operations
E	3E7X1	Fire Protection
E	3E8X1	Explosive Ordnance Disposal
E	3E9X1	Readiness
E	3H0X1	Historian
E	3M0X1	Services
E	3N0X1	Public Affairs
E	3N0X2	Radio and Television Broadcasting
E	3N1X1A	Regional Band, Clarinet
E	3N1X1B	Regional Band, Saxophone
E	3N1X1C	Regional Band, Bassoon
E	3N1X1D	Regional Band, Oboe
E	3N1X1E	Regional Band, Flute/Piccolo
E	3N1X1F	Regional Band, French Horn
E	3N1X1G	Regional Band, Cornet/Trumpet
E	3N1X1H	Regional Band, Baritone/Euphonium
E	3N1X1J	Regional Band, Trombone
E	3N1X1K	Regional Band, Tuba
E	3N1X1L	Regional Band, Percussion
E	3N1X1M	Regional Band, Piano
E	3N1X1N	Regional Band, Guitar
E	3N1X1P	Regional Band, Music Arranger
E	3N1X1R	Regional Band, Vocalist
E	3N1X1S	Regional Band, Electric/String Bass
E	3N1X1T	Regional Band, Military Band Support
E	3N1X1V	Regional Band, Audio and Lighting Engineer
E	3N1X1Z	Regional Band, Instrumentalist, General
E	3N2X1	Premier Band
E	3P0X1	Security
E	3P0X2	Law Enforcement
E	3P0X2A	Law Enforcement, Military Working Dog
E	3P1X1	Combat Arms Training and Maintenance
E	3P1X1A	Combat Arms Training and Maintenance Gunsmith
E	3R0X1	Printing Management
E	3S0X1	Personnel
E	3S0X2	Personnel System Management (PSM)
E	3S1X1	Equal Opportunity and Treatment
E	3S2X1	Education and Training
E	3U0X1	Manpower Management
E	3V0X1	Visual Information
E	3V0X2	Still Photographic
E	3V0X3	Visual Information Production Documentation
E	4A0X1	Health Services Management
E	4A1X1	Medical Materiel
E	4A2X1	Biomedical Equipment
E	4B0X1	Bioenvironmental Engineering
E	4C0X1	Mental Health Service
E	4D0X1	Diet Therapy
E	4E0X1	Public Health
E	4F0X1	Aeromedical
E	4H0X1	Cardiopulmonary Laboratory

E	4J0X1	Occupational Therapy
E	4J0X2	Physical Therapy
E	4M0X1	Aerospace Physiology
E	4N0X1	Medical Service
E	4N0X1A	Medical Service, Allergy/Immunology
E	4N0X1B	Medical Service, Neurology
E	4N1X1	Surgical Service
E	4N1X1B	Surgical Service, Urology
E	4N1X1C	Surgical Service, Orthopedics
E	4N1X1D	Surgical Service, Otorhinolaryngology
E	4P0X1	Pharmacy
E	4R0X1	Diagnostic Imaging
E	4R0X1A	Diagnostic Imaging, Nuclear Medicine
E	4R0X1B	Diagnostic Imaging, Ultrasound
E	4R0X1C	Diagnostic Imaging, Magnetic Resonance Imaging
E	4T0X1	Medical Laboratory
E	4T0X2	Histopathology
E	4T0X3	Cytotechnology
E	4U0X1	Orthotic
E	4V0X1	Optometry
E	4V0X1A	Optometry; Opthalmology
E	4Y0X1	Dental Assistant
E	4Y0X2	Dental Laboratory
E	5J0X1	Paralegal
E	5R0X1	Chaplain Service Support
E	6C0X1	Contracting
E	6F0X1	Financial Management
E	6F0X2	Financial Services
E	6F1X1	Financial Analysis
E	7S0X1	Special Investigations
E	8A000	In-Flight Passenger Service Specialist
E	8B000	Military Training Instructor
E	8B100	Military Training Manager
E	8C000	Family Support Center Superintendent
E	8D000	Linguist Debriefer/Interrogator
E	8E000	Research and Development Technician
E	8F000	First Sergeant
E	8G000	USAF Honor Guard
E	8J000	Correctional Custody Supervisor
E	8M000	Postal
E	8P000	Courier
E	8P100	Defense Attache Specialist
E	8R000	Recruiter
E	8S000	Missile Facility Manager
E	8S100	Sensor Operator
E	8T000	Professional Military Education Instructor
E	9C000	Chief Master Sergeant of the Air Force
E	9D000	Dormitory Manager
E	9E000	Senior Enlisted Adviser
E	9G000	Airman Aide
E	9L000	Interpreter/Translator
E	9R000	Civil Air Patrol (CAP)-USAF Reserve Assistance NCO
E	9S100	Applied Geophysics
E	9S200	Applied Sciences

O	10C0	Operations Commander
O	11AXA	Airlift Pilot, C-5
O	11AXB	Airlift Pilot, C-9
O	11AXC	Airlift Pilot, C-12
O	11AXD	Airlift Pilot, C-17
O	11AXE	Airlift Pilot, C-20
O	11AXF	Airlift Pilot, C-21
O	11AXG	Airlift Pilot, VC-25
O	11AXH	Airlift Pilot, C-26
O	11AXJ	Airlift Pilot, C-27
O	11AXK	Airlift Pilot, C-130
O	11AXL	Airlift Pilot, C-135/C-137
O	11AXM	Airlift Pilot, C-141
O	11AXN	Airlift Pilot, T-43
O	11AXP	Airlift Pilot, SUNT (T-1/T-2/T-34/T-38)
O	11AXR	Airlift Pilot, FSP Instructor (T-3/T-41)
O	11AXS	Airlift Pilot, SUPT Phase II Instructor (T-34/T-37)
O	11AXT	Airlift Pilot, SUPT Phase III Instructor (T-1/T-38/T-44)
O	11AXU	Airlift Pilot, Air Liaison Officer
O	11AXV	Airlift Pilot, Inter-Theater, General
O	11AXW	Airlift Pilot, Intra-Theater, General
O	11AXY	Airlift Pilot, General
O	11AXZ	Airlift Pilot, Other
O	11BXA	Bomber Pilot, B-1
O	11BXB	Bomber Pilot, B-2
O	11BXC	Bomber Pilot, B-52
O	11BXM	Bomber Pilot, T-37 ACE/CTP
O	11BXN	Bomber Pilot, T-38 ACE/CTP
O	11BXP	Bomber Pilot, SUNT(T-1/T-2/T-34/T-38)
O	11BXR	Bomber Pilot, FSP Instructor (T-3/T-41)
O	11BXS	Bomber Pilot, SUPT Phase II (T-34/T-37)
O	11BXT	Bomber Pilot, SUPT Phase III (T-1/T-38/T-44)
O	11BXU	Bomber Pilot, Air Liaison Officer
O	11BXY	Bomber Pilot, General
O	11BXZ	Bomber Pilot, Other
O	11EXA	Experimental Test Pilot, Airlift/Tanker/Bomber
O	11EXB	Experimental Test Pilot, Fighter
O	11EXC	Experimental Test Pilot, Helicopter/VSTOL
O	11EXP	Experimental Test Pilot, (T-1/T-2/T-34/T-38)
O	11EXQ	Experimental Test Pilot, Mission Support
O	11EXR	Experimental Test Pilot, FSP Instructor (T-3/T-41)
O	11EXS	Experimental Test Pilot, SUPT Phase II (T-34/T-37)
O	11EXT	Experimental Test Pilot, SUPT Phase III (T-1/T-38/T-44)
O	11EXU	Experimental Test Pilot, Air Liaison Officer
O	11EXY	Experimental Test Pilot, General
O	11EXZ	Experimental Test Pilot, Other
O	11FXA	Fighter Pilot, A-7
O	11FXB	Fighter Pilot, A-10
O	11FXC	Fighter Pilot, F-4
O	11FXD	Fighter Pilot, F-4G
O	11FXE	Fighter Pilot, RF-4
O	11FXF	Fighter Pilot, F-15
O	11FXG	Fighter Pilot, F-15E
O	11FXH	Fighter Pilot, F-16

O	11FXJ	Fighter Pilot, F-22
O	11FXK	Fighter Pilot, F-111
O	11FXL	Fighter Pilot, EF-111
O	11FXM	Fighter Pilot, F-117
O	11FXN	Fighter Pilot, OA-10
O	11FXP	Fighter Pilot, SUNT (T-1/T-2/T-34/T-38)
O	11FXQ	Fighter Pilot, AT-38
O	11FXR	Fighter Pilot, FSP Instructor (T-3/T-41)
O	11FXS	Fighter Pilot, SUPT Phase II (T-34/T-37)
O	11FXT	Fighter Pilot, SUPT Phase III (T-1/T-38/T-44)
O	11FXU	Fighter Pilot, Air Liaison Officer
O	11FXY	Fighter Pilot, General
O	11FXZ	Fighter Pilot, Other
O	11GX	Generalist Pilot
O	11HXA	Helicopter Pilot, HH-1H
O	11HXB	Helicopter Pilot, UH-1H
O	11HXC	Helicopter Pilot, UH-1N
O	11HXD	Helicopter Pilot, HH-3
O	11HXE	Helicopter Pilot, HH-60
O	11HXT	Helicopter Pilot, SUPT-H Instructor (UH-1/TH-67)
O	11HXU	Helicopter Pilot, Air Liaison Officer
O	11HXW	Helicopter Pilot, Combat Search and Rescue
O	11HXY	Helicopter Pilot, General
O	11HXZ	Helicopter Pilot, Other
O	11KXA	Trainer Pilot, T-1 SUPT(FAIP/Other)
O	11KXB	Trainer Pilot, T-3/T-41
O	11KXC	Trainer Pilot, T-34/T-37 SUPT (FAIP/Other)
O	11KXD	Trainer Pilot, T-38/T-44 SUPT (FAIP/Other)
O	11KXG	Trainer Pilot, SUNT (T-1/T-2/T-34/T-38)(FAIP/Other)
O	11KXL	Trainer Pilot, C-12 Companion Trainer Program
O	11KXM	Trainer Pilot, T-37 ACE/CTP
O	11KXN	Trainer Pilot, T-38 ACE/CTP
O	11KXU	Trainer Pilot, Air Liaison Officer
O	11KXY	Trainer Pilot, General
O	11KXZ	Trainer Pilot, Other
O	11RXA	Reconnaissance/Surveillance/Electronic Warfare Pilot, E-3
O	11RXB	Reconnaissance/Surveillance/Electronic Warfare Pilot, E-4
O	11RXC	Reconnaissance/Surveillance/Electronic Warfare Pilot, EC-130
O	11RXD	Reconnaissance/Surveillance/Electronic Warfare Pilot, HC-130
O	11RXE	Reconnaissance/Surveillance/Electronic Warfare Pilot, WC-130
O	11RXF	Reconnaissance/Surveillance/Electronic Warfare Pilot, EC-135
O	11RXG	Reconnaissance/Surveillance/Electronic Warfare Pilot, RC-135
O	11RXH	Reconnaissance/Surveillance/Electronic Warfare Pilot, WC/OC-135
O	11RXJ	Reconnaissance/Surveillance/Electronic Warfare Pilot, TR-1/U-2
O	11RXL	Reconnaissance/Surveillance/Electronic Warfare Pilot, E-8
O	11RXP	Reconnaissance/Surveillance/Electronic Warfare Pilot, SUNT (T-1/T-2/T-34/T-38)
O	11RXR	Reconnaissance/Surveillance/Electronic Warfare Pilot, FSP Instructor (T-3/T-41)
O	11RXS	Reconnaissance/Surveillance/Electronic Warfare Pilot, SUPT Phase II Instructor (T-34/T-37)
O	11RXT	Reconnaissance/Surveillance/Electronic Warfare Pilot, SUPT Phase III Instructor(T-1/T-38/T-44)
O	11RXU	Reconnaissance/Surveillance/Electronic Warfare Pilot, Air Liaison Officer
O	11RXY	Reconnaissance/Surveillance/Electronic Warfare Pilot, General
O	11RXZ	Reconnaissance/Surveillance/Electronic Warfare Pilot, Other

O	11SXA	Special Operations Pilot, MH-53
O	11SXB	Special Operations Pilot, MH-60
O	11SXC	Special Operations Pilot, AC-103H
O	11SXD	Special Operations Pilot, AC-130U
O	11SXE	Special Operations Pilot, HC-130
O	11SXF	Special Operations Pilot, MC-130E
O	11SXG	Special Operations Pilot, MC-130H
O	11SXP	Special Operations Pilot, SUNT (T-1/T-2/T-34/T-38)
O	11SXR	Special Operations Pilot, FSP Instructor(T-3/T-41)
O	11SXS	Special Operations Pilot, SUPT Phase II Instructor (T-34/T-37)
O	11SXT	Special Operations Pilot, SUPT Phase III Instructor (T-1/T-38/T-44)
O	11SXU	Special Operations Pilot, Air Liaison Officer
O	11SXV	Special Operations Pilot, SOF Helicopter General
O	11SXW	Special Operations Pilot, SOF Fixed Wing General
O	11SXY	Special Operations Pilot, General
O	11SXZ	Special Operations Pilot, Other
O	11TXA	Tanker Pilot, KC-10
O	11TXB	Tanker Pilot, KC-135
O	11TXL	Tanker Pilot, C-12 Companion Trainer Program
O	11TXM	Tanker Pilot, T-37 ACE/CTP
O	11TXN	Tanker Pilot, T-38 ACE/CTP
O	11TXP	Tanker Pilot, SUNT (T-1/T-2/T-34/T-38)
O	11TXR	Tanker Pilot, FSP Instructor(T-3/T-41)
O	11TXS	Tanker Pilot, SUPT Phase II Instructor (T-34/T-37)
O	11TXT	Tanker Pilot, SUPT Phase III Instructor (T-1/T-38/T-44)
O	11TXU	Tanker Pilot, Air Liaison Officer
O	11TXY	Tanker Pilot, General
O	11TXZ	Tanker Pilot, Other
O	12AXA	Airlift Navigator : C-5
O	12AXB	Airlift Navigator : VC-25
O	12AXC	Airlift Navigator : C-130
O	12AXD	Airlift Navigator : C-135/C-137
O	12AXE	Airlift Navigator : C-141
O	12AXT	Airlift Navigator : SUNT Instructor
O	12AXU	Airlift Navigator : Air Liaison Officer (ALO)
O	12AXV	Airlift Navigator : Inter-Theater Airlift, General
O	12AXW	Airlift Navigator : Intra-Theater Airlift, General
O	12AXY	Airlift Navigator : General
O	12AXZ	Airlift Navigator : Other
O	12BXA	Bomber Navigator : B-1 Defensive Systems Officer (EWO)
O	12BXB	Bomber Navigator : B-1 Offensive Systems Officer
O	12BXC	Bomber Navigator : B-1 WSO
O	12BXD	Bomber Navigator : B-52 EWO
O	12BXE	Bomber Navigator : B-52 Navigator/Radar Navigator
O	12BXS	Bomber Navigator : SUNT Instructor EWO
O	12BXT	Bomber Navigator : SUNT Instructor
O	12BXU	Bomber Navigator, Air Liaison Officer
O	12BXW	Bomber Navigator : EWO, General
O	12BXY	Bomber Navigator : General
O	12BXZ	Bomber Navigator : Other
O	12EXA	Experimental Test Navigator: Airlift/Tanker/Bomber
O	12EXB	Experimental Test Navigator: Fighter
O	12EXS	Experimental Test Navigator: SUNT Instructor EWO
O	12EXT	Experimental Test Navigator: SUNT Instructor

O	12EXU	Experimental Test Navigator: Air Liaison Officer (ALO)
O	12EXW	Experimental Test Navigator: EWO, General
O	12EXY	Experimental Test Navigator: General
O	12EXZ	Experimental Test Navigator: Other
O	12FXA	Fighter Navigator: F-4 WSO
O	12FXB	Fighter Navigator: F-4 EWO
O	12FXC	Fighter Navigator: F-4G EWO
O	12FXD	Fighter Navigator: RF-4 WSO
O	12FXE	Fighter Navigator: RF-4 EWO
O	12FXF	Fighter Navigator: F-15E WSO
O	12FXG	Fighter Navigator: F-15E EWO
O	12FXH	Fighter Navigator: F-111 WSO
O	12FXJ	Fighter Navigator: F-111 EWO
O	12FXK	Fighter Navigator: EF-111 EWO
O	12FXS	Fighter Navigator: SUNT Instructor EWO
O	12FXT	Fighter Navigator: SUNT Instructor
O	12FXU	Fighter Navigator: Air Liaison Officer (ALO)
O	12FXW	Fighter Navigator: EWO, General
O	12FXY	Fighter Navigator: General
O	12FXZ	Fighter Navigator: Other
O	12GX	Generalist Navigator
O	12KXA	Trainer Navigator: SUNT, General
O	12KXB	Trainer Navigator: EWO, General/Other
O	12KXY	Trainer Navigator: General
O	12KXZ	Trainer Navigator: Other
O	12RXA	Recon/Surv/EW Navigator, E-3
O	12RXB	Recon/Surv/EW Navigator, E-4
O	12RXC	Recon/Surv/EW Navigator, EC-130 EWO
O	12RXD	Recon/Surv/EW Navigator, EC-130
O	12RXE	Recon/Surv/EW Navigator, HC-130
O	12RXF	Recon/Surv/EW Navigator, WC-130
O	12RXG	Recon/Surv/EW Navigator, EC-135
O	12RXH	Recon/Surv/EW Navigator, RC-135 EWO
O	12RXJ	Recon/Surv/EW Navigator, RC-135
O	12RXK	Recon/Surv/EW Navigator, WC/OC-135
O	12RXL	Recon/Surv/EW Navigator, E-8
O	12RXS	Recon/Surv/EW Navigator, SUNT Instructor EWO
O	12RXT	Recon/Surv/EW Navigator, SUNT Instructor
O	12RXU	Recon/Surv/EW Navigator, Air Liaison Officer
O	12RXW	Recon/Surv/EW Navigator, EWO, General
O	12RXY	Recon/Surv/EW Navigator, General
O	12RXZ	Recon/Surv/EW Navigator, Other
O	12SXA	Special Operations Navigator, AC-130H EWO
O	12SXB	Special Operations Navigator, AC-130H FCO
O	12SXC	Special Operations Navigator, AC-130H
O	12SXD	Special Operations Navigator, AC-130U EWO
O	12SXE	Special Operations Navigator, AC-130U FCO
O	12SXF	Special Operations Navigator, AC-130U
O	12SXG	Special Operations Navigator, HC-130
O	12SXH	Special Operations Navigator, MC-130E EWO
O	12SXJ	Special Operations Navigator, MC-130E
O	12SXK	Special Operations Navigator, MC-130H EWO
O	12SXL	Special Operations Navigator, MC-130H
O	12SXS	Special Operations Navigator, SUNT Instructor EWO

O	12SXT	Special Operations Navigator, SUNT Instructor
O	12SXU	Special Operations Navigator, ALO
O	12SXW	Special Operations Navigator, EWO, General
O	12SXY	Special Operations Navigator, General
O	12SXZ	Special Operations Navigator, Other
O	12TXA	Tanker Navigator, KC-135
O	12TXT	Tanker Navigator, SUNT Instructor
O	12TXU	Tanker Navigator, Air Liaison Officer
O	12TXY	Tanker Navigator, General
O	12TXZ	Tanker Navigator, Other
O	13AXA	Astronaut : Pilot
O	13AXB	Astronaut : Mission Specialist
O	13BXB	Air Battle Management: AWACS
O	13BXC	Air Battle Management: Air Defense
O	13BXD	Air Battle Management: Mobile Air Control
O	13BXF	Air Battle Management: Adjutant
O	13BXJ	Air Battle Management: Air Field Management
O	13BXK	Air Battle Management: JSTARS
O	13BXL	Air Battle Management: ABCCC
O	13DX	Combat Control
O	13MX	Air Traffic Control
O	13SX	Space and Missile Operations
O	13SXA	Space and Missile Operations: Satellite Command and Control
O	13SXB	Space and Missile Operations: Spacelift
O	13SXC	Space and Missile Operations: Missile Combat Crew
O	13SXD	Space and Missile Operations: Space Surveillance
O	13SXE	Space and Missile Operations: Space Warning
O	14NX	Intelligence
O	14NXA	Intelligence, Operations
O	14NXB	Intelligence, Applications
O	14NXC	Intelligence, Mapping, Charting, and Geodesy
O	15WX	Weather
O	15WXA	Weather, Advanced Weather Actions
O	16AX	Air Attache
O	16PX	International Politico Military Affairs
O	16RX	Planning and Programming
O	20C0	Logistics Commander
O	21AX	Aircraft Maintenance and Munitions
O	21AXA	Aircraft Maintenance and Munitions, Nuclear Munitions
O	21GX	Logistics Plans
O	21LX	Logistician
O	21MX	Space and Missile Maintenance
O	21MXA	Space and Missile Maintenance, Missile
O	21MXB	Space and Missile Maintenance, Spacelift
O	21SX	Supply
O	21TX	Transportation
O	30C0	Support Commander
O	31PX	Security Police
O	32EXA	Civil Engineer, Architect/Architectural Engineer
O	32EXB	Civil Engineer, Readiness Engineer
O	32EXC	Civil Engineer, Civil Engineer
O	32EXD	Civil Engineer, Readiness Engineer (Non-Engineer)
O	32EXE	Civil Engineer, Electrical Engineer
O	32EXF	Civil Engineer, Mechanical Engineer

O	32EXG	Civil Engineer, General Engineer
O	32EXH	Civil Engineer, Explosive Ordnance Disposal
O	32EXJ	Civil Engineer, Environmental Engineer
O	32EXK	Civil Engineer, Explosive Ordnance Disposal Engineer (Non-Engineer)
O	33SX	Communications and Information
O	33SXA	Communications and Information, Electrical Engineer
O	33SXB	Communications and Information, Software Engineer
O	33SXC	Communications and Information, Software Programmer/Analyst
O	34MX	Services
O	35BX	Band
O	35PX	Public Affairs
O	36MX	Mission Support
O	36PX	Personnel
O	38MX	Manpower
O	40C0A	Medical Commander: Medical Services
O	40C0B	Medical Commander: Biomedical Sciences
O	40C0C	Medical Commander: Medical
O	40C0D	Medical Commander: Dental
O	40C0E	Medical Commander: Nurse
O	41AX	Health Services Administrator
O	42BX	Physical Therapist
O	42EX	Optometrist
O	42FX	Podiatrist
O	42GX	Physician Assistant
O	42GXA	Physician Assistant, Orthopedics
O	42GXB	Physician Assistant, Otolaryngology
O	42GXC	Physician Assistant, General Surgery
O	42GXD	Physician Assistant, Perfusionist
O	42NXA	Audiology/Speech Pathologist, Audiologist
O	42NXB	Audiology/Speech Pathologist, Speech Pathologist
O	42PX	Clinical Psychologist
O	42PXA	Clinical Psychologist, Neuropsychologist
O	42SX	Clinical Social Worker
O	42TX	Occupational Therapist
O	43AX	Aerospace Physiologist
O	43BX	Biomedical Scientist
O	43BXA	Biomedical Scientist, Chiropractor
O	43DX	Dietitian
O	43EX	Bioenvironmental Engineer
O	43EXA	Bioenvironmental Engineer, General
O	43EXB	Bioenvironmental Engineer, Industrial Hygiene
O	43EXC	Bioenvironmental Engineer, Medical Construction
O	43EXD	Bioenvironmental Engineer, Environmental
O	43EXE	Bioenvironmental Engineer, Architecture
O	43EXF	Bioenvironmental Engineer, Biomedical
O	43EXG	Bioenvironmental Engineer, Bioenv/Health Physics
O	43HX	Public Health
O	43MX	Medical Entomologist
O	43PX	Pharmacist
O	43RX	Veterinary Scientist
O	43RXA	Veterinary Scientist, Toxicology/Pharmacology
O	43RXB	Veterinary Scientist, Radiobiology/Biophysics
O	43RXC	Veterinary Scientist, Psychology
O	43RXD	Veterinary Scientist, Physiology/Biochemistry

O	43RXE	Veterinary Scientist, Microbiology
O	43TXA	Biomedical Laboratory, Biomedical Laboratory Science
O	43TXB	Biomedical Laboratory, Microbiology
O	43TXC	Biomedical Laboratory, Clinical Chemistry
O	43TXD	Biomedical Laboratory, Environmental and Industrial Hygiene Chemistry
O	43TXE	Biomedical Laboratory, Blood Bank
O	43TXF	Biomedical Laboratory, Toxicologist
O	43TXG	Biomedical Laboratory, Other
O	43TXH	Biomedical Laboratory, Hematology
O	43VXA	Veterinary Clinician, Surgery
O	43VXB	Veterinary Clinician, Internal Medicine
O	43VXC	Veterinary Clinician, Radiology
O	43VXD	Veterinary Clinician, Pathology
O	43VXE	Veterinary Clinician, Laboratory Animal
O	43YX	Health Physicist
O	43YXA	Health Physicist, Medical
O	44AX	Chief, Hospital Clinic Services
O	44DX	Pathologist
O	44DXA	Pathologist, Hematology
O	44DXB	Pathologist, Cytology
O	44DXC	Pathologist, Gynecology
O	44DXD	Pathologist, Forensic
O	44DXE	Pathologist, Neuropathology
O	44DXF	Pathologist, Pediatric
O	44DXG	Pathologist, Transfusion Medicine
O	44DXH	Pathologist, Microbiology
O	44DXJ	Pathologist, Immunology
O	44DXK	Pathologist, Dermatology
O	44EX	Emergency Services Physician
O	44EXA	Emergency Services Physician, Emergency Medicine Specialist
O	44FX	Family Physician
O	44GX	General Practice Physician
O	44HX	Nuclear Medicine Physician
O	44KX	Pediatrician
O	44KXA	Pediatrician, Adolescent Medicine
O	44KXB	Pediatrician, Cardiology
O	44KXC	Pediatrician, Developmental Pediatrics
O	44KXD	Pediatrician, Endocrinology
O	44KXE	Pediatrician, Neonatology
O	44KXF	Pediatrician, Gastroenterologist
O	44KXG	Pediatrician, Hematology
O	44KXH	Pediatrician, Neurology
O	44KXJ	Pediatrician, Pulmonology
O	44KXK	Pediatrician, Infectious Diseases
O	44KXL	Pediatrician, Medical Genetics
O	44KXM	Pediatrician, Nephrology
O	44MX	Internist
O	44MXA	Internist, Oncology
O	44MXB	Internist, Cardiology
O	44MXC	Internist, Endocrinology
O	44MXD	Internist, Gastroenterology
O	44MXE	Internist, Hematology
O	44MXF	Internist, Rheumatology
O	44MXG	Internist, Pulmonary Diseases

O	44MXH	Internist, Infectious Diseases
O	44MXJ	Internist, Nephrology
O	44NX	Neurologist
O	44PX	Psychiatrist
O	44PXA	Psychiatrist, Child Psychiatry
O	44RX	Diagnostic Radiologist
O	44RXA	Diagnostic Radiologist, Neuroradiology
O	44RXB	Diagnostic Radiologist, Special Procedures
O	44SX	Dermatologist
O	44SXA	Dermatologist, Dermatologic Surgery
O	44SXB	Dermatologist, Dermopathology
O	44TX	Radiotherapist
O	44YX	Critical Care Medicine
O	44YXA	Critical Care Medicine, Pediatrics
O	44ZX	Allergist
O	45AX	Anesthesiologist
O	45BX	Orthopedic Surgeon
O	45BXA	Orthopedic Surgeon, Hand Surgery
O	45BXB	Orthopedic Surgeon, Pediatrics
O	45BXC	Orthopedic Surgeon, Biomechanical
O	45BXD	Orthopedic Surgeon, Sports Medicine
O	45BXE	Orthopedic Surgeon, Spine Surgery
O	45BXF	Orthopedic Surgeon, Oncology
O	45BXG	Orthopedic Surgeon, Replacement Arthroplasty
O	45EX	Ophthalmologist
O	45EXA	Ophthalmologist, Oculoplastics
O	45EXB	Ophthalmologist, Cornea/External Disease
O	45EXC	Ophthalmologist, Glaucoma
O	45EXD	Ophthalmologist, Neuro-Opthalmology
O	45EXE	Ophthalmologist, Pathology
O	45EXF	Ophthalmologist, Strabismus/Pediatrics
O	45EXG	Ophthalmologist, Vitreous/Retina
O	45GX	Obstetrician and Gynecologist
O	45GXA	Obstetrician and Gynecologist, Endocrinology
O	45GXB	Obstetrician and Gynecologist, Oncology
O	45GXC	Obstetrician and Gynecologist, Pathology
O	45GXD	Obstetrician and Gynecologist, Maternal-Fetal Medicine
O	45NX	Otorhinolaryngologist
O	45PX	Physical Medicine Physician
O	45SX	Surgeon
O	45SXA	Surgeon, Thoracic
O	45SXB	Surgeon, Colon and Rectal
O	45SXC	Surgeon, Cardiac
O	45SXD	Surgeon, Pediatric
O	45SXE	Surgeon, Peripheral Vascular
O	45SXF	Surgeon, Neurological
O	45SXG	Surgeon, Plastic
O	45SXH	Surgeon, Oncology
O	45SXJ	Surgeon, Multi-Organ Transplant
O	45UX	Urologist
O	45UXA	Urologist, Pediatrics
O	45UXB	Urologist, Oncology
O	45UXC	Urologist, Kidney Transplant
O	46AX	Nursing Administrator

O	46FX	Flight Nurse
O	46GX	Nurse-Midwife
O	46MX	Nurse Anesthetist
O	46NX	Clinical Nurse
O	46NXA	Clinical Nurse, Women's Health Care Nurse Practitioner
O	46NXB	Clinical Nurse, Pediatric Nurse Practitioner
O	46NXC	Clinical Nurse, Primary Care Nurse Practitioner
O	46NXD	Clinical Nurse, Staff Development
O	46NXE	Clinical Nurse, Critical Care
O	46NXF	Clinical Nurse, Neonatal Intensive Care
O	46NXG	Clinical Nurse, Obstetrical
O	46NXH	Clinical Nurse, Family Nurse Practitioner
O	46PX	Mental Health Nurse
O	46PXA	Mental Health Nurse, Mental Health Nurse Specialist
O	46SX	Operating Room Nurse
O	47BX	Orthodontist
O	47DX	Oral Pathologist
O	47EX	Endodontist
O	47GX	Dentist
O	47GXA	Dentist, Comprehensive
O	47GXB	Dentist, Advanced Clinical
O	47GXC	Dentist, Gen Clinical
O	47HX	Periodontist
O	47KX	Pediatric Dentist
O	47PX	Prosthodontist
O	47SX	Oral and Maxillofacial Surgeon
O	48AX	Aerospace Medicine Specialist
O	48EX	Occupational Medicine Specialist
O	48FX	Family Practice Specialist
O	48GX	Aerospace Medicine Physician
O	48PX	Preventative Medicine Specialist
O	51JX	Judge Advocate
O	52RX	Chaplain
O	52RXA	Chaplain, Protestant
O	52RXB	Chaplain, Buddhist
O	52RXC	Chaplain, Roman Catholic
O	52RXD	Chaplain, Jewish
O	52RXE	Chaplain, Orthodox
O	52RXF	Chaplain, Muslim
O	60C0	Program Director
O	61SX	Scientist
O	61SXA	Scientist, Analytical
O	61SXB	Scientist, Behavioral
O	61SXC	Scientist, Chemist
O	61SXD	Scientist, Physicist
O	61SXE	Scientist, Mathematician
O	62EX	Developmental Engineer
O	62EXA	Developmental Engineer: Aeronautical
O	62EXB	Developmental Engineer: Astronautical
O	62EXC	Developmental Engineer: Computer Systems
O	62EXD	Developmental Engineer: Manufacturing
O	62EXE	Developmental Engineer: Electrical/Electronic
O	62EXF	Developmental Engineer: Flight Test
O	62EXG	Developmental Engineer: Project

O	62EXH	Developmental Engineer: Mechanical
O	63AX	Acquisition Manager
O	63AXA	Acquisition Manager, Computer Systems
O	63AXB	Acquisition Manager, Manufacturing
O	64PX	Contracting
O	65AX	Audit
O	65FX	Finance Management
O	65WX	Cost Analysis
O	71SX	Special Investigations
O	80C0	Commander, Cadet Squadron, USAF Academy
O	81C0	Training Commander, Officer Training School
O	81T0	Instructor
O	82A0	Academic Program Manager
O	83R0	Recruiting Service
O	84H0	Historian
O	85G0	United States Air Force Honor Guard
O	86M0	Operations Management
O	86P0	Command and Control
O	88A0	Aide-de-Camp
O	88P0	Protocol
O	90G0	General Officer
O	91C0	Commander
O	91W0	Wing Commander
O	92J0	Nondesignated Lawyer
O	94N0	Nuclear Weapons Custodian
O	95A0	Non-EAD USAFR Academy or Civil Air Patrol Liaison
O	97E0	Executive Officer Above Wing Level

Only Reporting Identifiers that are occupational in nature are included.

APPENDIX A-4
ARMY MILITARY OCCUPATIONAL SPECIALTIES (MOSs) AND AREA OF CONCENTRATION (AOCs)

Amry MOS and AOC Codes
(E)nlisted, (O)fficer and (W)arrant

EO_Type	MOS/AOC	MOS/AOC title
E	00B	Diver
E	02B	Cornet or Trumpet Player
E	02C	Euphonium Player
E	02D	French Horn Player
E	02E	Trombone Player
E	02F	Tuba Player
E	02G	Flute Player
E	02H	Oboe Player
E	02J	Clarinet Player
E	02K	Bassoon Player
E	02L	Saxophone Player
E	02M	Percussion Player
E	02N	Keyboard Player
E	02S	Special Band Member
E	02T	Guitar Player
E	02U	Electric Bass Player
E	02Z	Bands Senior Sergeant
E	11B	Infantryman
E	11C	Indirect Fire Infantryman
E	11H	Heavy Antiarmor Weapons Infantryman
E	11M	Fighting Vehicle Infantryman
E	11Z	Infantry Senior Sergeant
E	12B	Combat Engineer
E	12C	Bridge Crewmember
E	12Z	Combat Engineering Senior Sergeant
E	13B	Cannon Crewmember
E	13C	Automated Fire Support Systems (AFSS) Specialist
E	13E	Cannon Fire Direction Specialist
E	13F	Fire Support Specialist
E	13M	Multiple Launch Rocket System (MLRS) Crewmember
E	13P	Multiple Launch Rocket System Operations/Fire Direction Specialist
E	13R	Field Artillery (FA) Firefinder Radar Operator
E	13Z	Field Artillery Senior Sergeant
E	14D	HAWK Missile System Crewmember
E	14E	PATRIOT Fire Control Enhanced Operator/Maintainer
E	14J	Air Defense C4ITactical Operations Center Enhanced Operator/Maintainer
E	14L	AN/TSQ-73 Air Defense Artillery Command and Control System Operator/Maintainer
E	14M	Man Portable Air Defense System Crewmember
E	14R	BRADLEY Stinger Fighting Vehicle Crewmember
E	14S	AVENGER Crewmember
E	14T	PATRIOT Launching Station Enhanced Operator/Maintainer
E	14Z	Air Defense Artillery Senior Sergeant
E	18B	Special Forces Weapons Sergeant
E	18C	Special Forces Engineer Sergeant
E	18D	Special Forces Medical Sergeant
E	18E	Special Forces Communications Sergeant
E	18F	Special Forces Assistant Operations and Intelligence Sergeant
E	18Z	Special Forces Senior Sergeant
E	19D	Cavalry Scout

E	19E	M48 and M60 Armor Crewman
E	19K	M1 Armor Crewman
E	19Z	Armor Senior Sergeant
E	23R	HAWK Missile System Mechanic
E	24H	HAWK Fire Control Repairer
E	24K	HAWK Continuous Wave Radar Repairer
E	24N	CHAPARRAL System Mechanic
E	25M	Multimedia Illustrator
E	25R	Visual Information Equipment Operator-Maintainer
E	25V	Combat Documentation/Production Specialist
E	25Z	Visual Information Operations Chief
E	27E	Land Combat Electronic Missile System Repairer
E	27G	CHAPARRAL and REDEYE Repairer
E	27H	HAWK Field Maintenance Equipment and Firing Section Repairer
E	27K	HAWK Fire Control and Continuous Wave Radar Repairer
E	27M	Multiple Launch Rocket System (MLRS) Repairer
E	27T	AVENGER System Repairer
E	27X	PATRIOT System Repairer
E	27Z	Missile Systems Maintenance Chief
E	31C	Radio Operator - Maintainer
E	31F	Network Switching Systems Operator-Maintainer
E	31L	Cable Systems Installer-Maintainer
E	31P	Microwave Systems Operator-Maintainer
E	31R	Multichannel Transmission Systems Operator - Maintainer
E	31S	Satellite Communication Systems Operator-Maintainer
E	31T	Satellite/Microwave Systems Chief
E	31U	Signal Support Systems Specialist
E	31W	Telecommunications Operations Chief
E	31Z	Senior Signal Sergeant
E	33R	Electronic Warfare/Intercept Aviation Systems Repairer
E	33T	Electronic Warfare/Intercept Tactical Systems Repairer
E	33Y	Strategic Systems Repair
E	33Z	Electronic Warfare/Intercept Systems Maintenance Supervisor
E	35B	Land Combat Support System (LCSS) Test Specialist
E	35C	Surveillance Radar Repairer
E	35D	Air Traffic Control Equipment Repairer
E	35E	Radio and Communications Security (COMSEC) Repairer
E	35F	Special Electronic Devices Repairer
E	35H	Test, Measurement, and Diagnostic Equipment (TMDE) Maintenance Support Specialist
E	35J	Telecommunication Terminal Device Repairer
E	35L	Avionic Communications Equipment Repairer
E	35M	Radar Repairer
E	35N	Wire Systems Equipment Repairer
E	35Q	Avionic Flight Systems Repairer
E	35R	Avionic Radar Repairer
E	35W	Electronic Maintenance Chief
E	35Y	Integrated Family of Test Equipment (IFTE) Operator and Maintainer
E	35Z	Senior Electronic Maintenance Chief
E	37F	Psychological Operations Specialist
E	38A	Civil Affairs Specialist
E	39B	Automatic Test Equipment Operator and Maintainer
E	42E	Optical Laboratory Specialist
E	43M	Fabric Repair Specialist

E	44B	Metal Worker
E	44E	Machinist
E	45B	Small Arms/Artillery Repairer
E	45D	Self-Propelled Field Artillery Turret Mechanic
E	45E	M1 ABRAMS Tank Turret Mechanic
E	45G	Fire Control Repairer
E	45K	Armament Repairer
E	45N	M60A1/A3 Tank Turret Mechanic
E	45T	BRADLEY Fighting Vehicle System Turret Mechanic
E	46Q	Journalist
E	46R	Broadcast Journalist
E	46Z	Public Affairs Chief
E	51B	Carpentry and Masonry Specialist
E	51H	Construction Engineering Supervisor
E	51K	Plumber
E	51M	Firefighter
E	51R	Interior Electrician
E	51T	Technical Engineering Specialist
E	51Z	General Engineering Supervisor
E	52C	Utilities Equipment Repairer
E	52D	Power-Generation Equipment Repairer
E	52E	Prime Power Production Specialist
E	52F	Turbine Engine Driven Generator Repairer
E	52G	Transmission and Distribution Specialist
E	52X	Special Purpose Equipment Repairer
E	54B	Chemical Operations Specialist
E	55B	Ammunition Specialist
E	55D	Explosive Ordnance Disposal (EOD) Specialist
E	57E	Laundry and Shower Specialist
E	62B	Construction Equipment Repairer
E	62E	Heavy Construction Equipment Operator
E	62F	Crane Operator
E	62G	Quarrying Specialist
E	62H	Concrete and Asphalt Equipment Operator
E	62J	General Construction Equipment Operator
E	62N	Construction Equipment Supervisor
E	63B	Light-Wheel Vehicle Mechanic
E	63D	Self-Propelled Field Artillery System Mechanic
E	63E	M1 ABRAMS Tank System Mechanic
E	63G	Fuel and Electrical Systems Repairer
E	63H	Track Vehicle Repairer
E	63J	Quartermaster and Chemical Equipment Repairer
E	63N	M60A1/A3 Tank System
E	63S	Heavy-Wheel Vehicle Mechanic
E	63T	BRADLEY Fighting Vehicle System Mechanic
E	63W	Wheel Vehicle Repairer
E	63Y	Track Vehicle Mechanic
E	63Z	Mechanical Maintenance Supervisor
E	67G	Utility Airplane Repairer
E	67N	UH-1 Helicopter Repairer
E	67R	AH-64 Attack Helicopter Repairer
E	67S	OH-58D Helicopter Repairer
E	67T	UH-60 Helicopter Repairer
E	67U	CH-47 Helicopter Repairer

E	67V	Observation/Scout Helicopter Repairer
E	67Y	AH-1 Attack Helicopter Repairer
E	67Z	Aircraft Maintenance Senior Sergeant
E	68B	Aircraft Powerplant Repairer
E	68D	Aircraft Powertrain Repairer
E	68F	Aircraft Electrician
E	68G	Aircraft Structural Repairer
E	68H	Aircraft Pneudraulics Repairer
E	68J	Aircraft Armament/Missile Systems Repairer
E	68K	Aircraft Components Repair Supervisor
E	68N	Avionic Mechanic
E	68P	Avionic Maintenance Supervisor
E	68X	AH-64 Armament/Electrical Systems Repairer
E	71D	Legal Specialist
E	71G	Patient Administration Specialist
E	71L	Administrative Specialist
E	71M	Chaplain Assistant
E	73C	Finance Specialist
E	73D	Accounting Specialist
E	73Z	Finance Senior Sergeant
E	74B	Information Systems Operator-Analyst
E	74C	Telecommunications Operator-Maintainer
E	74G	Telecommunications Computer Operator-Maintainer
E	74Z	Information Systems Chief
E	75B	Personnel Administration Specialist
E	75F	Personnel Information System Management Specialist
E	75H	Personnel Services Specialist
E	76J	Medical Supply Specialist
E	77F	Petroleum Supply Specialist
E	77L	Petroleum Laboratory Specialist
E	77W	Water Treatment Specialist
E	79R	Recruiter
E	79S	Career Counselor
E	79T	Recruiting and Retention NCO
E	81L	Lithographer
E	81T	Topographic Analyst
E	81Z	Topographic Engineering Supervisor
E	82C	Field Artillery Surveyor
E	82D	Topographic Surveyor
E	88H	Cargo Specialist
E	88K	Watercraft Operator
E	88L	Watercraft Engineer
E	88M	Motor Transport Operator
E	88N	Transportation Management Coordinator
E	88P	Railway Equipment Repairer
E	88T	Railway Section Repairer
E	88U	Railway Operations Crewmember
E	88X	Railway Senior Sergeant
E	88Z	Transportation Senior Sergeant
E	91A	Medical Equipment Repairer
E	91B	Medical Specialist
E	91C	Practical Nurse
E	91D	Operating Room Specialist
E	91E	Dental Specialist

E	91K	Medical Laboratory Specialist
E	91M	Hospital Food Service Specialist
E	91P	Radiology Specialist
E	91Q	Pharmacy Specialist
E	91R	Veterinary Food Inspection Specialist
E	91S	Preventive Medicine Specialist
E	91T	Animal Care Specialist
E	91V	Respiratory Specialist
E	91X	Mental Health Specialist
E	92A	Automated Logistical Specialist
E	92G	Food Service Operations
E	92M	Mortuary Affairs Specialist
E	92R	Parachute Rigger
E	92Y	Unit Supply Specialist
E	92Z	Senior Noncommissioned Logistician
E	93B	Aeroscout Observer
E	93C	Air Traffic Control (ATC) Operator
E	93F	Field Artillery Meteorological Crewmember
E	93P	Aviation Operations Specialist
E	95B	Military Police
E	95C	Corrections Specialist
E	95D	CID Special Agent
E	96B	Intelligence Analyst
E	96D	Imagery Analyst
E	96H	Imagery Ground Station (IGS) Operator
E	96R	Ground Surveillance Systems Operator
E	96U	Unmanned Aerial Vehicle Operator
E	96Z	Intelligence Senior Sergeant
E	97B	Counterintelligence Agent
E	97E	Interrogator
E	97G	Multidiscipline Counterintelligence Operator/Analyst
E	97L	Translator/Interpreter
E	97Z	Counterintelligence/Human Intelligence Senior Sergeant
E	98C	Signals Intelligence Analyst
E	98D	Emitter Locator/Identifier
E	98G	Voice Interceptor
E	98H	Morse Interceptor
E	98J	Noncommunications Interceptor/Analyst
E	98K	Non-Morse Interceptor/Analyst
E	98Z	Signals Intelligence/Electronic Warfare Chief
O	00B	General officer
O	11A	Infantry
O	12A	Armor, General
O	12B	Armor
O	12C	Cavalry
O	13A	Field Artillery, General
O	14A	Air Defense Artillery, General
O	14B	Short-Range Air Defense Artillery [SHORAD]
O	14D	HAWK Missile Air Defense Artillery
O	14E	PATRIOT Missile Air Defense Artillery
O	15A	Aviation, General
O	15B	Aviation Combined Arms Operations
O	15C	Aviation All-Source Intelligence
O	15D	Aviation Logistics

O	18A	Special Forces
O	21A	Engineer General
O	21B	Combat Engineer
O	21D	Facilities/Contract Construction Management Engineer [FCCME]
O	25A	Signal, General
O	25B	Communications-Electronics (C-E) Automation
O	25C	Communications-Electronics (C-E) Operations
O	25D	Communications-Electronics (C-E) Engineering
O	25E	Information Systems and Networking
O	31A	Military Police
O	35B	Strategic Intelligence
O	35C	Imagery Intelligence
O	35D	All Source Intelligence
O	35E	Counter Intelligence
O	35F	Human Intelligence
O	35G	Signals Intelligence/Electronic Warfare
O	38A	Civil Affairs, General
O	39A	Psychological Operations or Civil Affairs, General
O	39B	Psychological Operations
O	39C	Civil Affairs
O	39X	Psychological Operations and Civil Affairs, Designated
O	41A	Personnel Programs Management Staff
O	42A	Adjutant General, General
O	42B	Personnel Systems Management
O	42C	Army Bands
O	42E	Administrative System Management
O	44A	Finance, General
O	45A	Comptroller
O	46A	Public Affairs, General
O	46B	Broadcast
O	47A	USMA Permanent Professor
O	47B	USMA Academy Professor
O	48A	Foreign Area, General
O	48B	Latin America
O	48C	Europe
O	48D	South Asia
O	48E	Eurasia
O	48F	China
O	48G	Mideast/North Africa
O	48H	Northeast Asia
O	48I	Southeast Asia
O	48J	Africa, South of the Sahara
O	49A	Operations Research, General
O	49B	Operations Research, Personnel
O	49C	Operations Research, Combat Operations/Materiel Systems
O	49D	Operations Research, Planning, Programming, and Resource Management
O	49E	Operations Research, Test, and Evaluation
O	49W	Trained ORSA
O	49X	Untrained ORSA
O	51A	Research and Development
O	51B	Test and Evaluation
O	51C	Combat Developments
O	51D	Acquisition
O	52B	Nuclear Research and Operations

O	53A	Systems Automation Management
O	53B	Systems Automation Engineering
O	53C	Systems Automation Acquisition
O	53X	Designated Systems Automation
O	54A	Operations, Plans and Training
O	55A	Judge Advocate, General
O	55B	Military Judge
O	56A	Command and Unit Chaplain
O	56D	Clinical Pastoral Educator
O	60A	Operational Medicine
O	60B	Nuclear Medicine Officer
O	60C	Preventive Medicine Officer
O	60D	Occupational Medicine Officer
O	60F	Pulmonary Disease Officer
O	60G	Gastroenterologist
O	60H	Cardiologist
O	60J	Obstetrician and Gynecologist
O	60K	Urologist
O	60L	Dermatologist
O	60M	Allergist, Clinical Immunologist
O	60N	Anesthesiologist
O	60P	Pediatrician
O	60Q	Pediatric Cardiologist
O	60R	Child Neurologist
O	60S	Ophthalmologist
O	60T	Otolaryngologist
O	60U	Child Psychiatrist
O	60V	Neurologist
O	60W	Psychiatrist
O	61A	Nephrologist
O	61B	Medical Oncologist/Hematologist
O	61C	Endocrinologist
O	61D	Rheumatologist
O	61E	Clinical Pharmacologist
O	61F	Internist
O	61G	Infectious Disease Officer
O	61H	Family Physician
O	61J	General Surgeon
O	61K	Thoracic Surgeon
O	61L	Plastic Surgeon
O	61M	Orthopedic Surgeon
O	61N	Flight Surgeon
O	61P	Physiatrist
O	61Q	Therapeutic Radiologist
O	61R	Diagnostic Radiologist
O	61U	Pathologist
O	61W	Peripheral Vascular Surgeon
O	61Z	Neurosurgeon
O	62A	Emergency Physician
O	62B	Field Surgeon
O	63A	General Dentist
O	63B	Comprehensive Dentist
O	63D	Periodontist
O	63E	Endodontist

O	63F	Prosthodontist
O	63H	Public Health Dentist
O	63K	Pediatric Dentist
O	63M	Orthodontist
O	63N	Oral and Maxillofacial Surgeon
O	63P	Oral Pathologist
O	63R	Executive Dentist
O	64A	Veterinarian
O	65A	Occupational Therapy
O	65B	Physical Therapy
O	65C	Dietitian
O	65D	Physician Assistant
O	66C	Psychiatric/Mental Health Nurse
O	66E	Operating Room Nurse
O	66F	Nurse Anesthetist
O	66H	Medical-Surgical Nurse
O	66N	Generalist Nurse
O	67A	Health Services
O	67B	Laboratory Sciences
O	67C	Preventive Medicine Sciences
O	67D	Behavioral Sciences
O	67E	Pharmacy
O	67F	Optometry
O	67G	Podiatry
O	67J	Aeromedical Evacuation
O	70A	Health Care Administration
O	70B	Health Services Administration
O	70C	Health Services Comptroller
O	70D	Health Services Systems Management
O	70E	Patient Administration
O	70F	Health Services Human Resources
O	70H	Health Services Plans, Operations, Intelligence, Security, and Training
O	70K	Health Services Materiel
O	71A	Microbiology
O	71B	Biochemistry
O	71E	Clinical Laboratory
O	71F	Research Psychology
O	72A	Nuclear Medical Science
O	72B	Entomology
O	72C	Audiology
O	72D	Environmental Science
O	72E	Sanitary Engineer
O	73A	Social Work
O	73B	Clinical Psychology
O	74A	Chemical, General
O	74B	Chemical Operations and Training
O	74C	Chemical Munitions and Materiel Management
O	75A	Field Veterinary Service
O	75B	Veterinary Preventive Medicine
O	75C	Veterinary Laboratory Animal Medicine
O	75D	Veterinary Pathology
O	75E	Veterinary Microbiology
O	75F	Veterinary Comparative Medicine
O	88A	Transportation, General

O	88B	Traffic Management
O	88C	Marine and Terminal Operations
O	88D	Motor/Rail Transportation
O	90A	Logistics
O	91A	Ordnance, General
O	91B	Maintenance Management
O	91D	Munitions Materiel Management
O	91E	Explosive Ordnance Disposal
O	92A	Quartermaster, General
O	92B	Supply and Materiel Management
O	92D	Aerial Delivery and Materiel
O	92F	Petroleum
O	97A	Contracting and Industrial Management Officer
W	131A	Field Artillery Targeting Technician
W	140A	Command and Control Systems Technician
W	140B	FAAD Systems Technician
W	140D	HAWK System Technician
W	140E	PATRIOT System Technician
W	150A	Air Traffic Control Technician
W	151A	Aviation Maintenance Technician
W	152B	OH-58A/C Scout Pilot
W	152C	OH-6 Pilot
W	152D	OH-58D Pilot
W	152F	AH-64 Attack Pilot
W	152G	AH-1 Attack Pilot
W	153A	Rotary Wing Aviator
W	153B	UH-1 Pilot
W	153D	UH-60 Pilot
W	154C	CH-47D Pilot
W	155A	Fixed Wing Aviator
W	155D	U-21 Pilot
W	155E	C-12 Pilot
W	180A	Special Forces Warrant Officer
W	210A	Utilities Operation and Maintenance Technician
W	215D	Terrain Analysis Technician
W	250A	Communications Security Technician
W	250B	Tactical Automated Network Technician
W	251A	Data Processing Technician
W	311A	CID Special Agent
W	350B	All Source Intelligence Technician
W	350D	Imagery Intelligence Technician
W	350L	Attache Technician
W	351B	Counter-Intelligence Technician
W	351C	Area Intelligence Technician
W	351E	Human Intelligence Collection Technician
W	352C	Traffic Analysis Technician
W	352D	Emitter Location/Identification Technician
W	352G	Voice Intercept Technician
W	352H	Morse Intercept Technician
W	352J	Emanations Analysis Technician
W	352K	Non-Morse Intercept Technician
W	353A	IEW Systems Maintenance Technician
W	420A	Military Personnel Technician
W	420C	Bandmaster

W	550A	Legal Administrator
W	600A	Physician Assistant
W	640A	Veterinary Services Technician
W	670A	Health Services Maintenance Technician
W	880A	Marine Deck Officer
W	881A	Marine Engineering Officer
W	910A	Ammunition Technician
W	912A	Land Combat Missile Systems Technician
W	913A	Armament Repair Technician
W	914A	Allied Trades Technician
W	915A	Unit Maintenance Technician (Light)
W	915D	Unit Maintenance Technician (Heavy)
W	915E	Support Maintenance Technician
W	916A	High-to-Medium Air Defense (HIMAD) Direct Support/General Support Maintenance Technician
W	917A	Maneuver Forces Air Defense Systems (MFADS) Technician
W	918A	TMDE Maintenance Support Technician
W	918B	Electronic Systems Maintenance Technician
W	919A	Engineer Equipment Repair Technician
W	920A	Property Accounting Technician
W	920B	Supply Systems Technician
W	921A	Airdrop Systems Technician
W	922A	Food Service Technician

APPENDIX B
PERCENT AGREEMENT BETWEEN ANALYST TEAMS A AND B

Appendix B: Percent Agreement Between Analyst Teams A and B

26-Mar-99

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
W 131A	**FIELD ARTILLERY TARGETING TECHNICIAN**				
E	2E000	COMMUNICATIONS-ELECTRONIC SYSTEMS MAN	1	1	1
E	2E091	GROUND RADAR	1		
		Count of Matches:	2	1	1

Total # of Unique Targets: 2 **Between Group Agreement:** 50.00%

EO_TYPE/PRIMARY_MOC/TITLE			TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
O	**14NXA**	**INTELLIGENCE OPERATIONS**				
	W	350B	ALL SOURCE INTELLIGENCE TECHNICIAN	1		
	W	350D	IMAGERY INTELLIGENCE TECHNICIAN			
	W	351B	COUNTERINTELLIGENCE TECHNICIAN			
	W	352C	TRAFFIC ANALYSIS TECHNICIAN			
	O	35B	STRATEGIC INTELLIGENCE	1	1	1
	O	35C	IMAGERY INTELLIGENCE	1	1	1
	O	35D	ALL SOURCE INTELLIGENCE	1	1	1
	O	35E	COUNTER-INTELLIGENCE		1	
	O	35F	HUMAN INTELLIGENCE		1	
	O	35G	SIGNALS INTELLIGENCE/ELECTRONIC WARFARE	1	1	1
			Count of Matches:	5	6	4

Total # of Unique Targets: 10 **Between Group Agreement:** 40.00%

EO_TYPE/PRIMARY_MOC/TITLE			TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E 1N2X1 SIGNALS INTELLIGENCE PRODUCTION						
	E	31C	RADIO OPERATOR-MAINTAINER		1	
	E	97G	MULTI-DISCIPLINE COUNTERINTELLIGENCE OPE	1	1	1
	E	98C	SIGNALS INTELLIGENCE ANALYST	1	1	1
	E	98D	EMITTER LOCATOR/IDENTIFIER	1	1	1
	E	98G	VOICE INTERCEPTOR	1		
	E	98H	MORSE INTERCEPTOR	1	1	1
	E	98J	NONCOMMUNICATIONS INTERCEPTOR/ANALYS	1		
	E	98K	NON-MORSE INTERCEPTOR/ANALYST	1	1	1
			Count of Matches:	7	6	5

Total # of Unique Targets: 8 **Between Group Agreement:** 62.50%

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E 1N3X3 SERBO-CROAT CRYPTO LINGUIST					
E	31C	RADIO OPERATOR-MAINTAINER		1	
E	97E	INTERROGATOR	1	1	1
E	97L	TRANSLATOR/INTERPRETER	1	1	1
E	98C	SIGNALS INTELLIGENCE ANALYST		1	
E	98CxL	SIGNALS INTELLIGENCE ANALYST, LINGUIST			
E	98G	VOICE INTERCEPTOR	1	1	1
E	98K	NON-MORSE INTERCEPTOR/ANALYST		1	
		Count of Matches:	3	6	3

Total # of Unique Targets: 7 **Between Group Agreement:** 42.86%

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E 1N6X1 ELECTRONIC SYSTEM SECURITY ASSESSMENT					
E	97G	MULTI-DISCIPLINE COUNTERINTELLIGENCE OPE	1	1	1
E	98D	EMITTER LOCATOR/IDENTIFIER		1	
E	98K	NON-MORSE INTERCEPTOR/ANALYST		1	
		Count of Matches:	1	3	1

Total # of Unique Targets: 3 **Between Group Agreement:** 33.33%

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
O 21B COMBAT ENGINEER					
O	32EXA	CIVIL ENGINEER, ARCHITECT/ARCHITECTURAL		1	
O	32EXB	CIVIL ENGINEER, READINESS ENGINEER	1	1	1
O	32EXC	CIVIL ENGINEER, CIVIL ENGINEER	1	1	1
O	32EXE	CIVIL ENGINEER, ELECTRICAL ENGINEER		1	
O	32EXF	CIVIL ENGINEER, MECHANICAL ENGINEER		1	
O	32EXG	CIVIL ENGINEER, GENERAL ENGINEER		1	
O	32EXH	CIVIL ENGINEER, EXPLOSIVE ORDNANCE DISPOS		1	
O	32EXJ	CIVIL ENGINEER, ENVIRONMENTAL ENGINEER		1	
		Count of Matches:	2	8	2
Total # of Unique Targets:		8 **Between Group Agreement:**		25.00%	
E 2A1X3 COMMUNICATION AND NAVIGATION SYSTEMS					
E	35L	AVIONIC COMMUNICATIONS EQUIPMENT REPAI	1	1	1
E	35Q	AVIONIC FLIGHT SYSTEMS REPAIRER	1	1	1
E	35R	AVIONIC RADAR REPAIRER	1	1	1
E	68N	AVIONIC MECHANIC	1	1	1
		Count of Matches:	4	4	4
Total # of Unique Targets:		4 **Between Group Agreement:**		100.00%	

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E 2E1X1 SATELLITE AND WIDEBAND COMMUNICATIONS EQ					
E	31C	RADIO OPERATOR-MAINTAINER	1	1	1
E	31F	NETWORK SWITCHING SYSTEMS OPERATOR-MA	1		
E	31L	CABLE SYSTEMS INSTALLER-MAINTAINER	1		
E	31P	MICROWAVE SYSTEMS OPERATOR-MAINTAINER	1	1	1
E	31R	MULTICHANNEL TRANSMISSION SYSTEMS OPER	1	1	1
E	31S	SATELLITE COMMUNICATION SYSTEMS OPERAT	1	1	1
E	31T	SATELLITE/MICROWAVE SYSTEMS CHIEF	1		
E	31U	SIGNAL SUPPORT SYSTEMS SPECIALIST	1		
E	33Y	STRATEGIC SYSTEMS REPAIRER	1		
		Count of Matches:	9	4	4

Total # of Unique Targets: 9 **Between Group Agreement:** 44.44%

E 2E6X1 COMMUNICATIONS AND ANTENNA SYSTEMS					
E	31L	CABLE SYSTEMS INSTALLER-MAINTAINER	1	1	1
E	31L-F2	CABLE SYSTEMS INSTALLER-MAINTAINER	1	1	1
		Count of Matches:	2	2	2

Total # of Unique Targets: 2 **Between Group Agreement:** 100.00%

EO_TYPE/PRIMARY_MOC/TITLE			TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E	**31F**	**NETWORK SWITCHING SYSTEMS OPERATOR-MAINT**				
	E	2E2X1	ELECTRONIC COMPUTER AND SWITCHING SYST	1	1	1
	E	2E3X1	SECURE COMMUNICATIONS SYSTEMS		1	
	E	2E6X3	TELEPHONE SYSTEMS	1	1	1
			Count of Matches:	2	3	2
Total # of Unique Targets:			3	**Between Group Agreement:**	66.67%	
O	**32EXE**	**CIVIL ENGINEER, ELECTRICAL ENGINEER**				
	W	210A	UTILITIES OPERATION AND MAINTENANCE TEC		1	
	O	21A	ENGINEER, GENERAL		1	
	O	21A-6K	ENGINEER, GENERAL	1		
	O	21B-6K	COMBAT ENGINEER, ELECTRICAL ENGINEER			
	O	21D	FACILITIES/CONTRACT CONSTRUCTION MANAG		1	
	O	21D-6K	FACILITIES/CONTRACT CONSTRUCTION MANAG	1		
	O	25D	COMMUNICATIONS-ELECTRONICS ENGINEERIN		1	
			Count of Matches:	2	4	0
Total # of Unique Targets:			7	**Between Group Agreement:**	0.00%	

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
O 32EXH CIVIL ENGINEER, EXPLOSIVE ORDNANCE DISPOSAL					
O	91E	EXPLOSIVE ORDNANCE DISPOSAL	1	1	1
		Count of Matches:	1	1	1
Total # of Unique Targets:	1	**Between Group Agreement:**	100.00%		
W 351B COUNTERINTELLIGENCE TECHNICIAN					
O	14NXA	INTELLIGENCE, OPERATIONS			
O	14NXB	INTELLIGENCE, APPLICATIONS			
O	71SX	SPECIAL INVESTIGATIONS	1	1	1
E	7S000	SPECIAL INVESTIGATIONS	1	1	1
E	8D000	LINGUIST DEBRIEFER/INTERROGATOR			
		Count of Matches:	2	2	2
Total # of Unique Targets:	5	**Between Group Agreement:**	40.00%		

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E 35E	**RADIO AND COMMUNICATIONS SECURITY (COMSEC**				
	E 2E1X3	GROUND RADIO COMMUNICATIONS	1	1	1
	E 2E3X1	SECURE COMMUNICATIONS SYSTEMS	1	1	1
		Count of Matches:	2	2	2
	Total # of Unique Targets:	2	**Between Group Agreement:**	100.00%	
E 35Q	**AVIONICS FLIGHT SYSTEMS REPAIRER**				
	E 2A1X2	AVIONICS GUIDANCE AND CONTROL SYSTEMS	1	1	1
	E 2A1X3	COMMUNICATION AND NAVIGATION SYSTEMS	1	1	1
	E 2A4X1	AIRCRAFT GUIDANCE AND CONTROL	1	1	1
	E 2A4X2	AIRCRAFT COMMUNICATION AND NAVIGATION	1	1	1
		Count of Matches:	4	4	4
	Total # of Unique Targets:	4	**Between Group Agreement:**	100.00%	

EO_TYPE/PRIMARY_MOC/TITLE			TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E 3E0X2 ELECTRIC POWER PRODUCTION						
	E	52D	POWER-GENERATION EQUIPMENT REPAIRER	1	1	1
	E	52E	PRIME POWER PRODUCTION SPECIALIST	1	1	1
	E	52F	TURBINE ENGINE DRIVEN GENERATOR REPAIRE	1	1	1
			Count of Matches:	3	3	3
Total # of Unique Targets:		3	**Between Group Agreement:**	100.00%		
E 3E2X1 PAVEMENTS AND CONSTRUCTION EQUIPMENT						
	E	12B	COMBAT ENGINEER		1	
	E	62E	HEAVY CONSTRUCTION EQUIPMENT OPERATOR	1	1	1
	E	62G	QUARRYING SPECIALIST		1	
	E	62H	CONCRETE AND ASPHALT EQUIPMENT OPERATO	1	1	1
	E	62J	GENERAL CONSTRUCTION EQUIPMENT OPERAT		1	
			Count of Matches:	2	5	2
Total # of Unique Targets:		5	**Between Group Agreement:**	40.00%		

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E 3E8X1 EXPLOSIVE ORDNANCE DISPOSAL					
E	54B	CHEMICAL OPERATIONS SPECIALIST		1	
E	55B	AMMUNITION SPECIALIST		1	
E	55D	EXPLOSIVE ORDNANCE DISPOSAL SPECIALIST	1	1	1
		Count of Matches:	1	3	1

Total # of Unique Targets: 3 **Between Group Agreement:** 33.33%

O 43EXD BIOENVIRONMENTAL ENGINEER, ENVIRONMENTAL					
O	67C	PREVENTIVE MEDICINE SCIENCES	1		
O	67C72D	PREVENTIVE MEDICINE SCIENCES, EVIRONMEN		1	
O	67C72E	PREVENTIVE MEDICINE SCIENCES, SANITARY E		1	
O	72D	ENVIRONMENTAL SCIENCE	1		
O	72E	SANITARY ENGINEER	1		
		Count of Matches:	3	2	0

Total # of Unique Targets: 5 **Between Group Agreement:** 0.00%

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
O 44MXA ONCOLOGY INTERNIST					
O	60B	NUCLEAR MEDICINE OFFICER	1		
O	61B	MEDICAL ONCOLOGIST/HEMATOLOGIST	1	1	1
O	61F	INTERNIST			
		Count of Matches:	2	1	1
Total # of Unique Targets:	3	**Between Group Agreement:**	33.33%		
O 45GXA OBSTETRICIAN AND GYNECOLOGIST, ENDOCRINOL					
O	60J	OBSTETRICIAN AND GYNECOLOGIST	1	1	1
O	61C	ENDOCRINOLOGIST	1		
		Count of Matches:	2	1	1
Total # of Unique Targets:	2	**Between Group Agreement:**	50.00%		
E 51B CARPENTRY AND MASONRY SPECIALIST					
E	3E3X1	STRUCTURAL	1	1	1
		Count of Matches:	1	1	1
Total # of Unique Targets:	1	**Between Group Agreement:**	100.00%		

EO_TYPE/PRIMARY_MOC/TITLE			TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
O	**60U**	**CHILD PSYCHIATRIST**				
	O	42PX	CLINICAL PSYCHOLOGIST	1		
	O	44PX	PSYCHIATRIST	1	1	1
	O	44PXA	PSYCHIATRIST, CHILD PSYCHIATRY	1	1	1
			Count of Matches:	3	2	2
	Total # of Unique Targets:		3 **Between Group Agreement:**	66.67%		
O	**62A**	**EMERGENCY PHYSICIAN**				
	O	44EX	EMERGENCY SERVICES PHYSICIAN	1	1	1
	O	44EXA	EMERGENCY SERVICES PHYSICIAN, EMERGENC	1	1	1
	O	44FX	FAMILY PHYSICIAN	1		
	O	44GX	GENERAL PRACTICE PHYSICIAN	1		
	O	44YX	CRITICAL CARE MEDICINE	1	1	1
			Count of Matches:	5	3	3
	Total # of Unique Targets:		5 **Between Group Agreement:**	60.00%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E 62J GENERAL CONSTRUCTION EQUIPMENT OPERATOR				
E 3E2X1	PAVEMENTS AND CONSTRUCTION EQUIPMENT	1	1	1
	Count of Matches:	1	1	1
Total # of Unique Targets: 1	**Between Group Agreement:**	100.00%		
E 77W WATER TREATMENT SPECIALIST				
E 3E4X1	UTILITIES SYSTEMS	1	1	1
	Count of Matches:	1	1	1
Total # of Unique Targets: 1	**Between Group Agreement:**	100.00%		
O 88A TRANSPORTATION, GENERAL				
O 21TX	TRANSPORTATION	1	1	1
	Count of Matches:	1	1	1
Total # of Unique Targets: 1	**Between Group Agreement:**	100.00%		

EO_TYPE/PRIMARY_MOC/TITLE		TARGET_MOC/TITLE	TEAM_A	TEAM_B	AB_MATCH
E 96D IMAGERY ANALYST					
	E 1N0X1	INTELLIGENCE OPERATIONS		1	
	E 1N1X1	IMAGERY INTERPRETER	1	1	1
		Count of Matches:	1	2	1
Total # of Unique Targets:	2	**Between Group Agreement:**	50.00%		
E 98G VOICE INTERCEPTOR					
	E 1N3XX	CRYPTOLOGIC LINGUIST	1	1	1
	E 3C1X1	RADIO COMMUNICATIONS SYSTEMS	1		
		Count of Matches:	2	1	1
Total # of Unique Targets:	2	**Between Group Agreement:**	50.00%		
Total # of Unique Targets:	112	**Overall Percent Agreement:**	50.00%	76	83	56

APPENDIX C
PERMUTATION TEST RESULTS

Appendix C: Permutation Test Results

09-Apr-99

Primary Occupation	Primary Code	Overall Score	Content Score	Qualifications Score
FIELD ARTILLERY TARGETING TECHNICIAN	131A	1	1	1
INTELLIGENCE OPERATIONS	14NXA	0.75	0.75	0.8125
SIGNALS INTELLIGENCE PRODUCTION	1N2X1	0.5	0.609375	0.5
SERBO-CROAT CRYPTO LINGUIST	1N3X3D	1	1	0.5
ELECTRONIC SYSTEM SECURITY ASSESSMENT	1N6X1	1	1	1
COMBAT ENGINEER	21B	1	1	1
COMMUNICATION AND NAVIGATION SYSTEMS	2A1X3	0.25	0.5	0.25
SATELLITE AND WIDEBAND COMMUNICATIONS EQUIPMEN	2E1X1	0.0625	0.0625	0.25
COMMUNICATIONS AND ANTENNA SYSTEMS	2E6X1	1	1	0.5
NETWORK SWITCHING SYSTEMS OPERATOR-MAINTAINER	31F	1	1	1
CIVIL ENGINEER, EXPLOSIVE ORDNANCE DISPOSAL	32EXH	0.5	0.5	1
COUNTERINTELLIGENCE TECHNICIAN	351B	1	1	0.5
RADIO AND COMMUNICATIONS SECURITY (COMSEC) REPA	35E	0.75	0.75	0.75
AVIONICS FLIGHT SYSTEMS REPAIRER	35Q	1	1	1
ELECTRIC POWER PRODUCTION	3E0X2	1	1	1
PAVEMENTS AND CONSTRUCTION EQUIPMENT	3E2X1	1	1	1
EXPLOSIVE ORDNANCE DISPOSAL	3E8X1	1	1	1

Primary Occupation	Primary Code	Overall Score	Content Score	Qualifications Score
ONCOLOGY INTERNIST	44MXA	1	1	0.5
OBSTETRICIAN AND GYNECOLOGIST, ENDOCRINOLOGY	45GXA	0.5	0.5	0.5
CARPENTRY AND MASONRY SPECIALIST	51B	1	1	1
CHILD PSYCHIATRIST	60U	1	1	1
EMERGENCY PHYSICIAN	62A	0.125	0.125	0.125
GENERAL CONSTRUCTION EQUIPMENT OPERATOR	62J	1	1	1
WATER TREATMENT SPECIALIST	77W	1	1	1
TRANSPORTATION, GENERAL	88A	1	1	1
IMAGERY ANALYST	96D	1	1	1
VOICE INTERCEPTOR	98G	1	1	1

APPENDIX D
PERCENT AGREEMENT BETWEEN ANALYST TEAM AND SME TEAM

Appendix D: Percent Agreement Between Analyst Team and SME Team

09-Apr-99

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
W 131A FIELD ARTILLERY TARGETING TECHNICIAN				
E 2E000	**COMMUNICATIONS-ELECTRONIC SYSTEMS MANAGER**	1		
Comments:	this AFSC has only a 1 in 10 chance of being familiar with radar equipment; also 131A does commissioned officer targeting jobs in the ops areas similar to the AF weapons control officer 13DX (no description available)			
E 2E091	**GROUND RADAR**	1	1	1
Comments:	jobs are very similar			
	Count of Matches:	2	1	1

Total # of Unique Targets: 2 **Between Group Agreement:** 50.00%

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
O 14NXA INTELLIGENCE OPERATIONS				
W	**350B ALL SOURCE INTELLIGENCE TECHNICIAN**		1	
Comments:	Performs all the functions of 35D. Can do both management and hands-on.			
W	**350D IMAGERY INTELLIGENCE TECHNICIAN**		1	
Comments:	Same overlap as 35C.			
W	**351B COUNTERINTELLIGENCE TECHNICIAN**		1	
Comments:	See 351B analysis - reciprocal overlap			
W	**352C TRAFFIC ANALYSIS TECHNICIAN**		1	
Comments:				
O	**35B STRATEGIC INTELLIGENCE**	1	1	1
Comments:				
O	**35C IMAGERY INTELLIGENCE**	1	1	1
Comments:				
O	**35D ALL SOURCE INTELLIGENCE**	1	1	1
Comments:	35D performs critical duties of 14NXA, but the reverse is not true			
O	**35E COUNTER INTELLIGENCE**	1	1	1
Comments:				

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
O 35F	HUMAN INTELLIGENCE	1	1	1
Comments:				
O 35G	SIGNALS INTELLIGENCE/ELECTRONIC WARFARE	1	1	1
Comments:				
	Count of Matches:	6	10	6

Total # of Unique Targets: 10 Between Group Agreement: 60.00%

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 1N2X1 SIGNALS INTELLIGENCE PRODUCTION				
E	97G MULTI-DISCIPLINE COUNTERINTELLIGENCE OPERAT	1		
Comments:	97G is a defensive position, related to C-3 protect, whereas Signals Intell. is an offensive position			
E	98C SIGNALS INTELLIGENCE ANALYST	1	1	1
Comments:	98C will match more strongly to 1N4			
E	98D EMITTER LOCATOR/IDENTIFIER	1	1	1
Comments:	98D will be merged with 98H beginning FY 98			
E	98G VOICE INTERCEPTOR	1		
Comments:	98G is a language-inherent career - no significant overlap in duties between two jobs: additionally 96Bmentioned as a possible target but not significant enough to warrant a rating of 1			
E	98H MORSE INTERCEPTOR	1	1	1
Comments:	currently, only duty not covered by 98H is identification of signal location; will probably change to a "3" when 98H and 98D merge			
E	98J NONCOMMUNICATIONS INTERCEPTOR/ANALYST	1	1	1
Comments:	weak 2			
E	98K NON-MORSE INTERCEPTOR/ANALYST	1	1	1
Comments:	Relevant ASIs, M7, and K2, would not change rating			

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE		TEAM MATCH	SME MATCH	BOTH MATCH
		Count of Matches:	7	5	5
Total # of Unique Targets:	7	**Between Group Agreement:**	71.43%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 1N3X3 SERBO-CROAT CRYPTO LINGUIST				
	E 97E INTERROGATOR	1		
Comments:	There is some overlap in that both must speak a foreign language, but the overlap is not significant for a critical duty - 97E would likely be a match to AF 8D000, which is a SDI for Linguist Debriefer/Interrogator.			
	E 97L TRANSLATOR/INTERPRETER	1		
Comments:	This is a reserves component that was set up to classify linguists without specific background. Many of these individuals are used on an as-needed basis and have not been trained in cryptology. In Gulf War, called up individuals with language fluencies to help but they needed signficant training. AF equivalent of this MOS might be 9L000, a Reporting Identifier of Interpreter/Translator			
	E 98CxL SIGNALS INTELLIGENCE ANALYST, LINGUIST		1	
Comments:	SQI - L necessary. The Signals Intelligence Analyst often has duties that involve specific languages, and can perform the cryptological duties of cryptolinguist - would also need to have language code of SC.			
	E 98G VOICE INTERCEPTOR	1	1	1
Comments:	For this career area, both occupations must have the same language. Must also be able to perform cryptology. DLPT score may be critical. Must have a language code of SC in order to be a match. Army language codes are found at the end of the 9-digit MOSC. There is a proposal to reduce the number of MOSC digits to 7.			

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
	Count of Matches:	3	2	1
Total # of Unique Targets: 4	**Between Group Agreement:**	25.00%		

E 1N6X1 ELECTRONIC SYSTEM SECURITY ASSESSMENT

E	**97G**	**MULTI-DISCIPLINE COUNTERINTELLIGENCE OPERAT**	1	1	1

Comments: 97G may be eliminated, since it's a small MOS with only 200 staff. Army occupation does not do jamming, but that responsibility is being eliminated from AF job. Army occupation involves assessing vulnerabilities of all types of communications, not just signals, so it's a 2. 97G may also match with SDI of 8D000

E	**98D**	**EMITTER LOCATOR/IDENTIFIER**	1		

Comments: 98D not trained in any security assessment. May be able to do the job with signficant training because they know the equipment, but no overlap in critical duties

E	**98K**	**NON-MORSE INTERCEPTOR/ANALYST**	1		

Comments: 98K not trained in assessment of vulnerabilities, but would be a potential link if significant training was provided.

	Count of Matches:	3	1	1
Total # of Unique Targets: 3	**Between Group Agreement:**	33.33%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
O 21B COMBAT ENGINEER				
O	**32EXA CIVIL ENGINEER, ARCHITECT/ARCHITECTURAL ENGI**	1		
Comments:	Army occupation does not require degree - AF could probably do Army occupation, but not vice versa			
O	**32EXB CIVIL ENGINEER, READINESS ENGINEER**	1	1	1
Comments:				
O	**32EXC CIVIL ENGINEER, CIVIL ENGINEER**	1		
Comments:	Army occupation does not require degree - AF could probably do Army occupation, but not vice versa			
O	**32EXE CIVIL ENGINEER, ELECTRICAL ENGINEER**	1		
Comments:	Army occupation does not require degree - AF could probably do Army occupation, but not vice versa			
O	**32EXF CIVIL ENGINEER, MECHANICAL ENGINEER**	1		
Comments:	Army occupation does not require degree - AF could probably do Army occupation, but not vice versa			
O	**32EXG CIVIL ENGINEER, GENERAL ENGINEER**	1	1	1
Comments:				
O	**32EXH CIVIL ENGINEER, EXPLOSIVE ORDNANCE DISPOSAL E**	1		
Comments:	21B does not perform EOD tasks			

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
O 32EXJ	CIVIL ENGINEER, ENVIRONMENTAL ENGINEER	1		
Comments:	Army occupation does not require degree - AF could probably do Army occupation, but not vice versa			
	Count of Matches:	8	2	2
Total # of Unique Targets: 8	Between Group Agreement:	25.00%		
E 2A1X3	COMMUNICATION AND NAVIGATION SYSTEMS			
E 35L	AVIONIC COMMUNICATIONS EQUIPMENT REPAIRER	1	1	1
Comments:				
E 35Q	AVIONIC FLIGHT SYSTEMS REPAIRER	1		
Comments:	only links on repairs on RDF, VOR, Marker beacons - not considered significant duties			
E 35R	AVIONIC RADAR REPAIRER	1	1	1
Comments:				
E 68N	AVIONIC MECHANIC	1	1	1
Comments:				
	Count of Matches:	4	3	3
Total # of Unique Targets: 4	Between Group Agreement:	75.00%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 2E1X1 SATELLITE AND WIDEBAND COMMUNICATIONS EQ				
E	**31C RADIO OPERATOR-MAINTAINER**	1		
Comments:	equipment and systems operate in different bands of the frequency specturm			
E	**31P MICROWAVE SYSTEMS OPERATOR-MAINTAINER**	1	1	1
Comments:				
E	**31R MULTICHANNEL TRANSMISSION SYSTEMS OPERATOR**	1	1	1
Comments:				
E	**31S SATELLITE COMMUNICATION SYSTEMS OPERATOR-M**	1	1	1
Comments:				
	Count of Matches:	4	3	3

Total # of Unique Targets: 4 **Between Group Agreement:** 75.00%

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 2E6X1 COMMUNICATIONS AND ANTENNA SYSTEMS				
	E 31L CABLE SYSTEMS INSTALLER-MAINTAINER	1		
Comments:	31L without the F2 ASI is not a match because the AF occupation deals only with cables associated with antenna systems			
	E 31L-F2 CABLE SYSTEMS INSTALLER-MAINTAINER, ANTENNA	1	1	1
Comments:	ASI F2 - ANTENNA INSTALLATION			
	Count of Matches:	2	1	1
Total # of Unique Targets:	2 **Between Group Agreement:**	50.00%		
E 31F NETWORK SWITCHING SYSTEMS OPERATOR-MAINT				
	E 2E2X1 ELECTRONIC COMPUTER AND SWITCHING SYSTEMS	1	1	1
Comments:				
	E 2E6X3 TELEPHONE SYSTEMS	1	1	1
Comments:	the only difference between the AF and Army occupations is that the AF does the actual telephone installation - everything up until the installation of the phones is the same			
	Count of Matches:	2	2	2
Total # of Unique Targets:	2 **Between Group Agreement:**	100.00%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
O 32EXE CIVIL ENGINEER, ELECTRICAL ENGINEER				
W 210A UTILITIES OPERATION AND MAINTENANCE TECHNICI		1		
Comments:	Primary focus of 32EXE is design of elec. systems; 210A is a broader operation and maintenance function			
O 21A ENGINEER, GENERAL		1		
Comments:	32EXE requires a degree in electrical engineering - 21A could not fill the 32EXE position.			
O 21A-6K ENGINEER, GENERAL, ELECTRICAL ENGINEER			1	
Comments:	Becomes a match with ASI 6K - ELECTRICAL ENGINEER			
O 21B-6K COMBAT ENGINEER, ELECTRICAL ENGINEER			1	
Comments:	Becomes a match with ASI 6K - ELECTRICAL ENGINEER			
O 21D FACILITIES/CONTRACT CONSTRUCTION MANAGEMEN		1		
Comments:	same comments as 21A			
O 21D-6K FACILITIES/CONTRACT CONSTRUCTION MANAGEMEN			1	
Comments:	Becomes a match with ASI 6K - ELECTRICAL ENGINEER			
O 25D COMMUNICATIONS-ELECTRONICS ENGINEERING		1		
Comments:	completely different job description/functional requirements			

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
	Count of Matches:	4	3	0
Total # of Unique Targets:	7	**Between Group Agreement:**	0.00%	

O 32EXH CIVIL ENGINEER, EXPLOSIVE ORDNANCE DISPOSAL

O 91E	**EXPLOSIVE ORDNANCE DISPOSAL**	1	1	1

Comments: Different focus - AF = Air ordnance; Army = ground ordnance

	Count of Matches:	1	1	1
Total # of Unique Targets:	1	**Between Group Agreement:**	100.00%	

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
W 351B COUNTERINTELLIGENCE TECHNICIAN				
O	**14NXA INTELLIGENCE, OPERATIONS**		1	
Comments:	Data collection overlap -(Humint) prior to fusion into all source analysis			
O	**14NXB INTELLIGENCE, APPLICATIONS**		1	
Comments:	Both do intelligence threat analysis of military capabilities/vulnerabilities			
O	**71SX SPECIAL INVESTIGATIONS**	1	1	1
Comments:	while not stated, same area of responsibility and duties as enlisted position			
E	**7S000 SPECIAL INVESTIGATIONS**	1	1	1
Comments:				
E	**8D000 LINGUIST DEBRIEFER/INTERROGATOR**		1	
Comments:	Overlap on the debriefing/Humint critical job duty			
	Count of Matches:	2	5	2

Total # of Unique Targets: 5 **Between Group Agreement:** 40.00%

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 35E RADIO AND COMMUNICATIONS SECURITY (COMSEC				
	E 2E1X3 GROUND RADIO COMMUNICATIONS	1	1	1
Comments:	some 2E1X3 need to know COMSEC			
	E 2E3X1 SECURE COMMUNICATIONS SYSTEMS	1	1	1
Comments:	2E3X1 does not have radio communications training			
	Count of Matches:	2	2	2

Total # of Unique Targets: 2 Between Group Agreement: 100.00%

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 35Q AVIONICS FLIGHT SYSTEMS REPAIRER				
E	**2A1X2 AVIONICS GUIDANCE AND CONTROL SYSTEMS**	1	1	1
Comments:	AF maintenance is primarily off equipment whereas Army maint. is primarily on equipment			
E	**2A1X3 COMMUNICATION AND NAVIGATION SYSTEMS**	1		
Comments:	both occupations perform VOR and glideslope receiver repair, but this is only a minor duty for the AF job (the AF could perform the Army job, but the reverse is not true)			
E	**2A4X1 AIRCRAFT GUIDANCE AND CONTROL**	1	1	1
Comments:				
E	**2A4X2 AIRCRAFT COMMUNICATION AND NAVIGATION SYST**	1		
Comments:	both occupations perform VOR and glideslope receiver repair, but this is only a minor duty for the AF job (the AF could perform the Army job, but the reverse is not true)			
	Count of Matches:	4	2	2

Total # of Unique Targets: 4 **Between Group Agreement:** 50.00%

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 3E0X2 ELECTRIC POWER PRODUCTION				
E 52D	POWER-GENERATION EQUIPMENT REPAIRER	1	1	1
Comments:	Difference between 52E and 52D is just the type of generator			
E 52E	PRIME POWER PRODUCTION SPECIALIST	1	1	1
Comments:				
E 52F	TURBINE ENGINE DRIVEN GENERATOR REPAIRER	1	1	1
Comments:	Difference between 52E and 52F is just the type of generator			
	Count of Matches:	3	3	3

Total # of Unique Targets: 3 **Between Group Agreement:** 100.00%

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 3E2X1 PAVEMENTS AND CONSTRUCTION EQUIPMENT				
E	12B COMBAT ENGINEER	1		
Comments:	No overlap on any critical areas.			
E	62E HEAVY CONSTRUCTION EQUIPMENT OPERATOR	1	1	1
Comments:	Operator only. Link on 1 job duty			
E	62G QUARRYING SPECIALIST	1		
Comments:	Quarrying not a critical job duty for 3E2X1. Not signficant overlap.			
E	62H CONCRETE AND ASPHALT EQUIPMENT OPERATOR	1	1	1
Comments:	Very specialized on rock preparation only. Overlab on 1 job duty.			
E	62J GENERAL CONSTRUCTION EQUIPMENT OPERATOR	1	1	1
Comments:	Overlap on 1 critical job duty, heavy equipment operator			
	Count of Matches:	5	3	3

Total # of Unique Targets: 5 Between Group Agreement: 60.00%

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 3E8X1 EXPLOSIVE ORDNANCE DISPOSAL				
	E 55D EXPLOSIVE ORDNANCE DISPOSAL SPECIALIST	1	1	1
Comments:				
	Count of Matches:	1	1	1
Total # of Unique Targets:	1 **Between Group Agreement:**	100.00%		
O 43EXD BIOENVIRONMENTAL ENGINEER, ENVIRONMENTAL				
	O 67C72D PREVENTIVE MEDICINE SCIENCES, ENVIRONMENTAL	1	1	1
Comments:	MFA essential - 67C too broad as stand alone //the job is similar to 72E, but 72D is not required to have engineering degree - could be problematic for AF if no degree			
	O 67C72E PREVENTIVE MEDICINE SCIENCES, SANITARY ENGINE	1	1	1
Comments:	MFA essential - 67C too broad as stand alone // need consider specific skills of individuals and specific position requirements/environment			
	Count of Matches:	2	2	2
Total # of Unique Targets:	2 **Between Group Agreement:**	100.00%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
O 44MXA ONCOLOGY INTERNIST				
O 61B	**MEDICAL ONCOLOGIST/HEMATOLOGIST**	1	1	1
Comments:	Oncologist/Hematologist training is combined - basically doing the same job			
O 61F	**INTERNIST**		1	
Comments:	can do diagnosis and treatment, but not consulting in specialty of oncology			
	Count of Matches:	1	2	1
Total # of Unique Targets:	2 **Between Group Agreement:**	50.00%		
O 45GXA OBSTETRICIAN AND GYNECOLOGIST, ENDOCRINOL				
O 60J	**OBSTETRICIAN AND GYNECOLOGIST**	1	1	1
Comments:				
	Count of Matches:	1	1	1
Total # of Unique Targets:	1 **Between Group Agreement:**	100.00%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 51B CARPENTRY AND MASONRY SPECIALIST				
	E 3E3X1 STRUCTURAL	1	1	1
Comments:	Welding and locksmith are critical job duties			
	Count of Matches:	1	1	1
Total # of Unique Targets:	1 **Between Group Agreement:**	100.00%		
O 60U CHILD PSYCHIATRIST				
	O 44PX PSYCHIATRIST	1	1	1
Comments:				
	O 44PXA PSYCHIATRIST, CHILD PSYCHIATRY	1	1	1
Comments:				
	Count of Matches:	2	2	2
Total # of Unique Targets:	2 **Between Group Agreement:**	100.00%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
O 62A EMERGENCY PHYSICIAN				
O	**44EX EMERGENCY SERVICES PHYSICIAN**	1	1	1
Comments:	not trained in residency as Emergency Medicine			
O	**44EXA EMERGENCY SERVICES PHYSICIAN, EMERGENCY MED**	1	1	1
Comments:				
O	**44GX GENERAL PRACTICE PHYSICIAN**		1	
Comments:	Same job as 44EX			
O	**44YX CRITICAL CARE MEDICINE**	1		
Comments:	Significance affected by environment - not ignificance affected by environment - critical care has subspecialty			
	Count of Matches:	3	3	2
Total # of Unique Targets:	4 **Between Group Agreement:**	50.00%		
E 62J GENERAL CONSTRUCTION EQUIPMENT OPERATOR				
E	**3E2X1 PAVEMENTS AND CONSTRUCTION EQUIPMENT**	1	1	1
Comments:				
	Count of Matches:	1	1	1
Total # of Unique Targets:	1 **Between Group Agreement:**	100.00%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 77W WATER TREATMENT SPECIALIST				
	E 3E4X1 UTILITIES SYSTEMS	1	1	1
Comments:				
	Count of Matches:	1	1	1
Total # of Unique Targets: 1	**Between Group Agreement:**	100.00%		
O 88A TRANSPORTATION, GENERAL				
	O 21TX TRANSPORTATION	1	1	1
Comments: Difference in experience and environment				
	Count of Matches:	1	1	1
Total # of Unique Targets: 1	**Between Group Agreement:**	100.00%		

EO_TYPE/PRIMARY_MOC/TITLE	TARGET_MOC/TITLE	TEAM MATCH	SME MATCH	BOTH MATCH
E 96D IMAGERY ANALYST				
	E 1N1X1 IMAGERY INTERPRETER	1	1	1
Comments:	1N1X1 has critical skills which 96 D is not trained in (e.g., UAV, Imagery Ground Station, etc.): Also, 1N1X1 school is 24 weeks wherease 96D is only 14 weeks long. 1N1X1 has four related jobs in the Army, each of which comprises part of job: 96D (40%, rating of 2), 96H (40% rating of 2), 96R (5% rating of 1), and 96U (15% rating of 1).			
	Count of Matches:	1	1	1
Total # of Unique Targets: 1	**Between Group Agreement:**	100.00%		
E 98G VOICE INTERCEPTOR				
	E 1N3XX CRYPTOLOGIC LINGUIST	1	1	1
Comments:	Must be the same language. Identified 2 AFSC codes that have language capabilities and could be used in a pinch with some signficiant training: 8D000, Linguist Debriefer/Interrogator, and 9L000, Interpreter/Translator, but they do not overlap enough to warrant a rating of "1". Additionally, MOS 98CL would be equivalent, and we should identify a way to note that in the database			
	Count of Matches:	1	1	1
Total # of Unique Targets: 1	**Between Group Agreement:**	100.00%		
Total # of Unique Targets: 91	**Overall Percent Agreement:** 58.24%	78	66	53

APPENDIX E
INCIDENCE OF LINKED TARGETS BY OCCUPATIONAL FIELD

Table E-1. Number of Linked Targets by Air Force Enlisted Career Field

Number of Targets	Career Field	Career Field Title
7	1A	Aircrew Operations
3	1C	Command Control Systems Operations
59	1N	Intelligence
0	1S	Safety
3	1T	Aircrew Protection
0	1W	Weather
29	2A	Aerospace Maintenance
22	2E	Communications - Electronics Systems
2	2F	Fuels
0	2G	Logistics Plans
0	2M	Missile Maintenance
3	2P	Precision Measurement
0	2R	Maintenance Management Systems
2	2S	Supply
18	2T	Transportation and Vehicle Maintenance
2	2W	Munitions and Weapons
2	3A	Information Management
11	3C	Communications/Computer Systems
16	3E	Civil Engineering
0	3H	Historian
6	3M	Services
22	3N	Public Affairs
7	3P	Security Police
1	3R	Printing Management
4	3S	Mission Support
1	3U	Manpower
6	3V	Visual Information
10	4A	Health Services
6	4F	Biomedical Clinicians
22	4M	Biomedical Specialists
3	4U	Medicine
2	4Y	Dental
1	5J	Legal
1	5R	Chaplain Service Support
0	6C	Contracting
2	6F	Financial
2	7S	Special Investigations
3	RI	Reporting Identifier
7	SD	Special Duty Identifier

Table E-2. Number of Linked Targets by Air Force Officer Utilization Field

Number of Targets	Utilization Field	Utilization Field Title
0	10	Operations Commander
186	11	Pilot
0	12	Navigator
3	13	Space, Missile, and C2
22	14	Intelligence
0	15	Weather
27	16	Operations Support
0	20	Logistics Commander
13	21	Logistics
0	30	Support Commander
2	31	Security
24	32	Civil Engineer
12	33	Communications
3	34	Services
4	35	Public Affairs
3	36	Mission Support
2	38	Manpower
0	40	Medical Commander
8	41	Health Services
19	42	Biomedical Clinicians
61	43	Biomedical Specialists
93	44	Physician
57	45	Surgery
22	46	Nurse
33	47	Dental
21	48	Aerospace Medicine
2	51	Law
7	52	Chaplain
0	60	Program Director
16	61	Scientific Research and Development
10	62	Developmental Engineer
7	63	Acquisition
1	64	Contracting
6	65	Finance
5	71	Special Investigations
1	RI	Reporting Identifier
3	SD	Special Duty Identifier

Table E-3. Number of Linked Targets by Army Enlisted Career Management Field

Number of Targets*	Career Management Field	Career Management Field Title
1	11	Infantry
0	12	Combat Engineering
0	13	Field Artillery
0	14	Air Defense Artillery
4	18	Special Forces
0	19	Armor
7	25	Visual Information
16	31	Signal Operations
5	33	Electronic Warfare/Intercept Systems Maintenance
17	35	Electronic Maintenance and Calibration
0	37	Psychological Operations
0	38	Civil Affairs
3	46	Public Affairs
10	51	General Engineering
1	54	Chemical
2	55	Ammunition
20	63	Mechanical Maintenance
23	67	Aircraft Maintenance
12	71	Administration
5	74	Information Systems Operations
3	77	Petroleum and Water
2	79	Recruiting and Retention
1	81	Topographic Engineering
4	88	Transportation
39	91	Medical
15	92	Supply and Services
3	93	Aviation Operations
7	95	Military Police
10	96	Military Intelligence
20	97	Bands
55	98	Signals Intelligence/Electronic Warfare

* Includes those associated with Additional Skill Identifiers.

Table E-4. Number of Linked Targets by Army Officer Branch/Functional Area

Number of Targets*	Branch/ Functional Area	Branch/Functional Area Title
1	11	Infantry
0	12	Armor
0	13	Field Artillery
0	14	Air Defense Artillery
130	15	Aviation
0	18	Special Forces
21	21	Corps of Engineers
6	25	Signal Corps
2	31	Military Police
15	35	Military Intelligence
1	38	Civil Affairs
3	39	Psychological Operations and Civil Affairs
2	41	Personnel Programs Management
2	42	Adjutant General's Corps
3	44	Finance Corps
2	45	Comptroller
2	46	Public Affairs
2	47	USMA Permanent Faculty
20	48	Foreign Area Officer
7	49	Operations Research/Systems Analysis
28	51	Research, Development and Acquisition
0	52	Nuclear Research and Operations
7	53	Systems Automation
2	54	Operations, Plans, and Training
2	55	Judge Advocate General's Corps
7	56	Chaplain
171	60	Medical Corps
33	63	Dental Corps
1	64	Veterinary Corps
8	65	Army Medical Specialist Corps
22	66	Army Nurse Corps
10	67	Medical Service Corps
13	70	Health Services
14	71	Laboratory Sciences
21	72	Preventive Medicine Sciences
3	73	Behavioral Sciences
2	74	Chemical
21	75	Veterinary Services
3	88	Transportation Corps
3	90	Logistics
6	91	Ordnance
5	92	Quartermaster Corps
1	97	Contracting and Industrial Management
0	RI	Reporting Identifiers

* Includes those associated with Additional Skill Identifiers.

Table E-5. Number of Linked Targets by Army Warrant Officer Branch

Number of Targets*	Branch	Branch Title
0	13	Field Artillery
0	14	Air Defense Artillery
53	15	Aviation
0	18	Special Forces
1	21	Corps of Engineers
2	25	Signal Corps
1	31	Military Police
10	35	Military Intelligence
1	42	Adjutant General
0	55	Judge Advocate General's Corps
5	60	Medical Corps
1	64	Veterinary Corps
0	67	Medical Service Corps
0	88	Transportation Corps
1	91	Ordnance
1	92	Quartermaster

* Includes those associated with Additional Skill Identifiers.

APPENDIX F
MISL SYSTEM USER'S MANUAL

Table of Contents

1. INTRODUCTION

1.1 Background and Purpose

The Military Skill Linkage System (MISL) was developed as a tool for personnel planners by the Air Force's Armstrong Laboratory. The system provides linkages of comparable occupations between the Air Force and the Army. Users enter search criteria for an occupation for which they would like to find matches in the other Service. The system then returns a list of potential target occupations that might be considered to backfill a shortfall situation. Users have the ability to view and compare occupational descriptions on-screen to assist in the selection of appropriate matches.

1.2 Guidelines and Limitations

The occupational linkages presented in MISL are intended only to provide direction in determining the appropriate equivalent occupation. MISL does not indicate the best target occupation for each shortfall situation; in fact, it is expected that different target occupations would be appropriate for different shortfall needs. Air Force and Army occupations were linked based on both partial and complete overlap of job content and qualifications. For this reason, it is important for the planner to know the specific duty requirements of the particular shortfall position in order to best utilize MISL.

Occupations are linked at the level of the basic military occupational code (MOC). For the Air Force, this is equivalent to the Air Force Specialty Code (AFSC), for both the officers and the enlisted. For the Army, the MOC is equivalent to the Military Occupational Specialty (MOS) for the enlisted and warrant officer personnel, and the Area of Concentration (AOC) for the commissioned officers. In some instances, Army additional skill identifiers (ASIs), special qualification identifiers (SQIs), and skill identifiers (SIs) were added to the basic MOC in order to establish a match with the Air Force occupation. In the prototype delivery system, additional codes will only appear when the user conducts a query that begins with the Air Force as the shortfall Service. Users are not permitted to enter additional codes for the Army as part of the search criteria. For this reason, some occupations may not show linkages when starting from the Army if the only matches that exist require additional codes. Users can identify links to these additional codes by performing searches beginning with related career fields in the Air Force.

Based on a decision by Armstrong Laboratory and the Air Force/Army customer advisory group, linkages were not established for some senior supervisory and commander codes. In the Air Force, these codes include the chief enlisted managers (CEMs), superintendent and officer commander codes. In the Army, linkages were not established for the enlisted "Chief" or "Senior Sergeant" occupations (e.g., 12Z, Combat Engineering Senior Sergeant", and 31T, Satellite/Microwave Systems Chief). Based on recommendations from the customer advisory group, Army warrant officer occupations were only linked to Air Force officers.

The occupational descriptions that appear in the system were taken from the Service occupational classification manuals. All occupational information is current through 12/31/96.

1.3 Summary of Features

The MISL system provides personnel planners with the necessary tools for quick identification of comparable occupations between the Air Force and the Army. The system was designed to be flexible and easy to use.

FLEXIBLE SEARCHING
- Input search criteria by MOC code or career area.
- Input desired codes by typing them in or selecting from pull-down lists.

ON-SCREEN ANALYSIS OF SEARCH RESULTS
- Review a list of "target" or matching occupations.
- Compare occupational descriptions on-screen or print them out.
- Select the best matches and create your own reports or requests.
- Save your customized requests and results for later use.

VARIETY OF OUTPUTS
- Print reports for hard copy documentation.
- Export reports to text files for use in other documents.
- E-mail reports or personnel requests.

2. INSTALLATION

2.1 MISL System Requirements

Before installing MISL, please ensure that your computer meets the minimum requirements needed to run MISL. If you will be installing MISL on more than one computer, you will need to check each machine prior to installation. To use MISL, you will need the following:

- An IBM-compatible personal computer with a 486 or higher (i.e., 486, Pentium, Pentium Pro) processor, and a clock speed of at least 50 megahertz. MISL will not operate on Macintosh or Apple computers.
- At least 8 megabytes of available random access memory (RAM).
- A hard disk with at least 20 megabytes of free space.
- A VGA or SVGA color monitor. *(The MISL system was designed assuming the monitor is set to a 640x480 display).*
- Windows 3.1 or higher.
- Microsoft MSMAIL software if you want to use MISL's e-mail functions.

Any PC that has Windows 95 installed should meet all of the minimum requirements for memory and clock speed.

If the computer you intend to use meets or exceeds the above specifications, then you can install and run MISL. Follow the steps in the next section to load MISL onto your computer.

MISL is not designed to run as a network application. You must fully install MISL as a stand-alone application on each PC on which you intend to use MISL.

2.2 MISL Installation

To install MISL, make sure you are running MS Windows™. It is recommended that you exit all other applications before installing MISL.

STEP 1

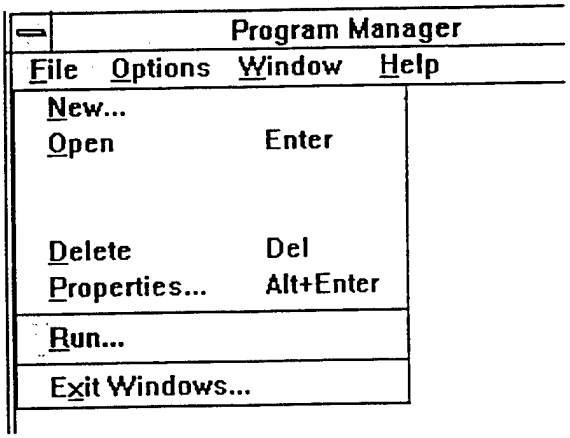
Insert the disk labeled MISL, Disk 1, into the floppy drive of your computer. You will need to know if this is the A or B drive. For the purpose of this example, we will assume you are using drive A.

STEP 2

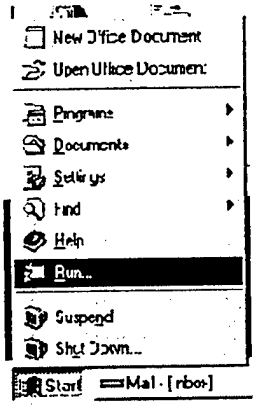
From Program Manager:

- Windows 3.1 users should select ***File, Run.***
  Windows 95 users should select ***Start, Run***.

Windows 3.1



Windows 95



- In the space provided, type `A:\Setup` and select **OK**.
- Read the Welcome Message, and select **OK**.
- When prompted about installation options, accept the MISL directory default or select another directory, then select **OK**.
- When prompted for what type of installation you would like, click on the **Complete** button.

- When prompted for a Program Manager group, accept the MISL group default, or type your own in, then select **OK**.

- MISL will then start installing. Please put the subsequent disks in the A: drive when prompted by the installation program.

You have now successfully installed MISL. Now you can begin using MISL (see Chapter 3: *Using The MISL System*).

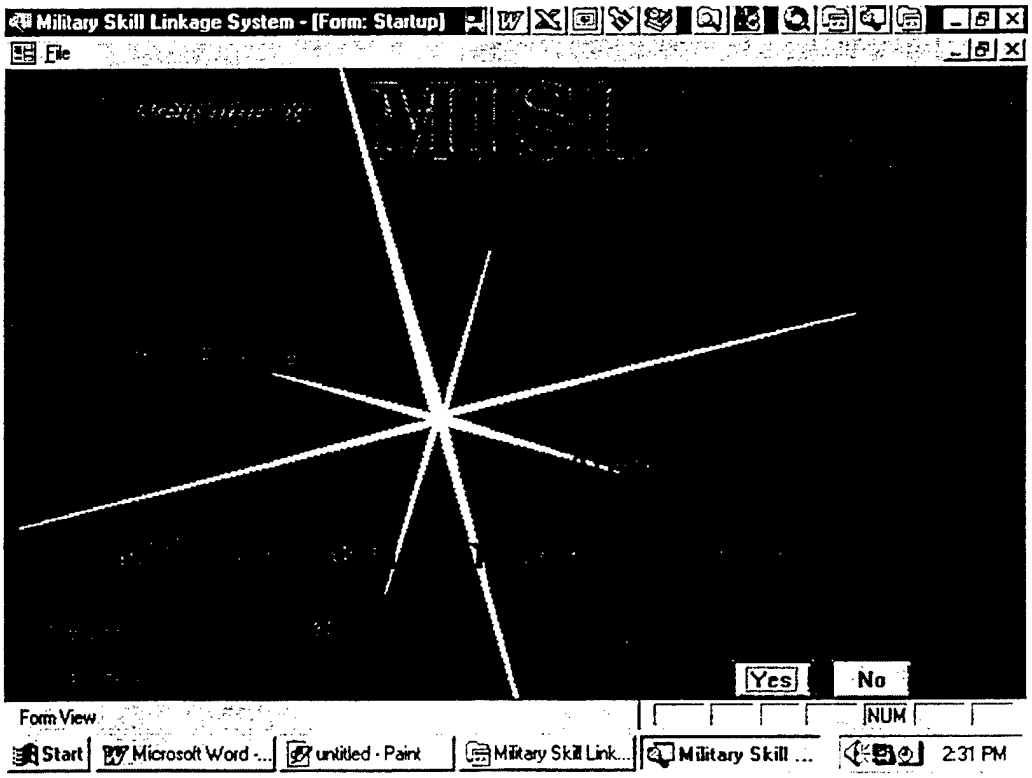
3. USING THE MISL SYSTEM

This section includes step-by-step instructions for using the MISL software. It also includes explanations of specific codes and indicators used within the system.

3.1 Getting Started

PROGRAM START-UP

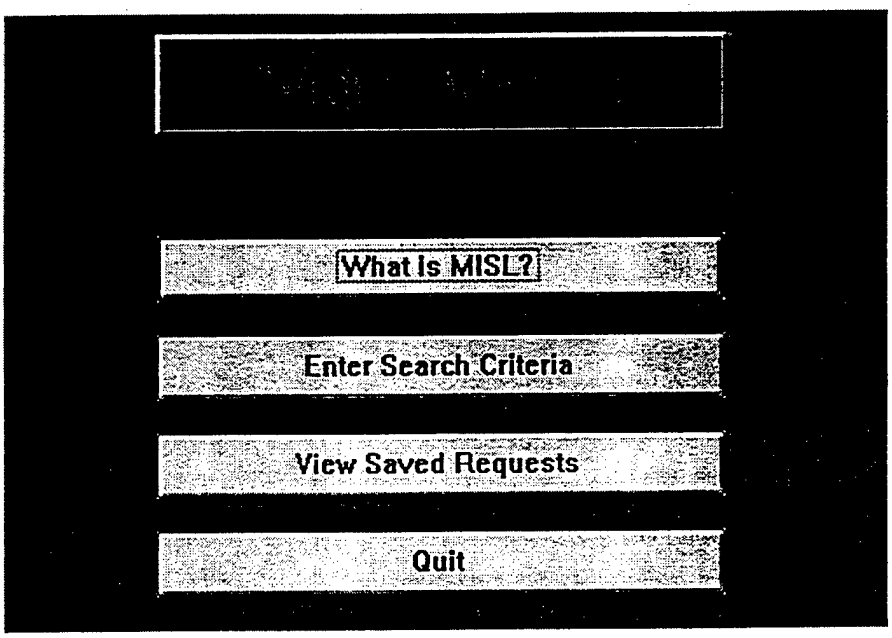
Once MISL is installed onto your computer's hard drive, just double-click on the MISL icon in the Program Group MISL to launch the application. Launching the application will bring you to the Welcome Screen.



On the welcome screen, you must answer the question before proceeding.

- Select **No** if you have not used the system before to view a brief description of the MISL system.
- Select **Yes** to go to the Main Menu and begin using MISL.

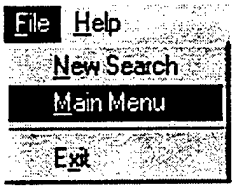
MAIN MENU



This screen provides access to all of the major functions of MISL.

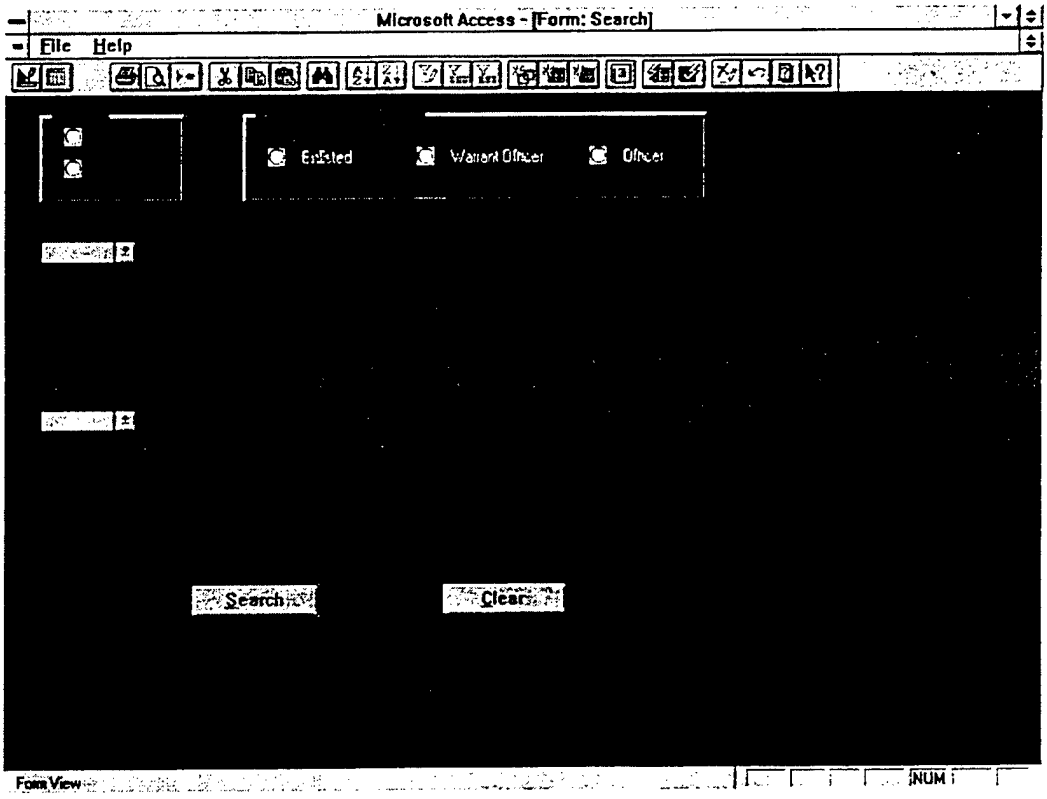
- Select **What Is MISL?** for a brief description of the system.
- Select **Enter Search Criteria** to start a search.
- Select **View Saved Requests** to access previously saved reports.
- Select **Quit** to exit the application.

The Main Menu is accessible from every screen by selecting **File, Main Menu from the Menu bar:

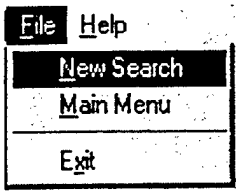


3.2 Entering Search Criteria

To access the search component of MISL, select **Enter Search Criteria** from the Main Menu. This will bring you to the New Search screen:



The New Search screen is accessible from every screen by selecting **File, New Search from the Menu bar:

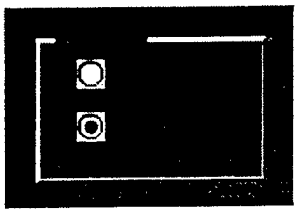


ENTERING THE SHORTFALL MOC

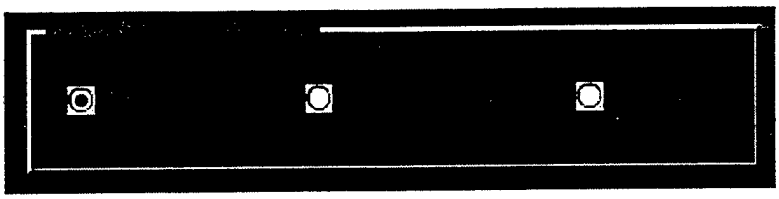
The New Search screen is to be used to identify potential target occupations that may be used to backfill a shortfall situation. The user must first identify the shortfall MOC.

STEP 1 Select the Shortfall Service and Community.

- Select **Air Force** or **Army**:



- Select **Enlisted, Warrant Officer,** or **Officer** to indicate the personnel community:



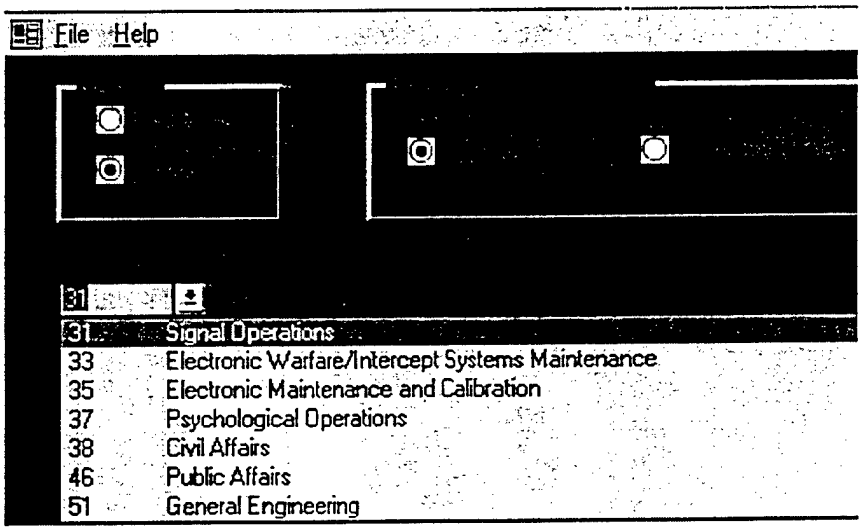
***Warrant officers will not be an option if Air Force is selected, as the Air Force does not have warrant officers.*

STEP 2 Enter the MOC (Military Occupational Code)

You can select the MOC one of two ways, by searching through the Career Field, or by directly entering the MOC:

Searching by Career Field:

- Type the two-digit career field into the **Career Field** box, or click on the desired item from the displayed list of career fields that match the Service and community you have selected:



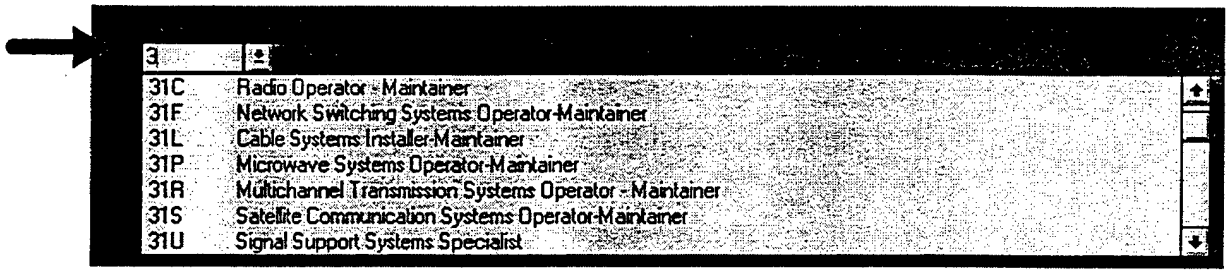
- Use the scroll bar that appears on the right hand side of the box to move through the list.

- Once a career field has been chosen, the list of MOCs in that career field appears below. Select one of the MOCs, or select another career field if you do not see the desired MOC. You may also enter the MOC directly into the MOC field without entering anything in the career field.

Searching by MOC:

- Type the MOC code that you would like to search on directly into the **MOC** box, or use the drop box to select an occupation from the entire list of MOCs. When typing in the MOC code, do not include the skill level as part of the code. For AFSC codes, use an "X" in place of the skill level (e.g. 1N2X1 instead of 1N251). For Army occupations, use the MOS or AOC (e.g. 31F, 215D, or 25B).

  ***Remember that this list is guided by the Service and community choices you previously made, so you will only view the options you selected earlier (e.g., Army enlisted occupations).*



- The drop box feature has a search capability to assist you when you have only partial information. As you type in the MOC, MISL restricts the list of possible occupations accordingly. Therefore, if you know you are looking for an Army enlisted MOC code that begins with "3", but you do not know the exact code, you may type "3" in the MOC field, then select the drop box. You will be presented only with MOCs beginning with "3".

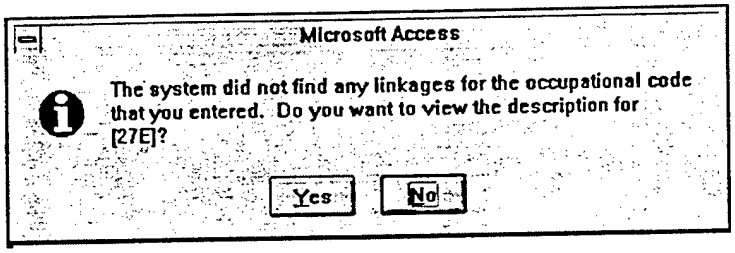
Once you have selected the desired MOC on which to search, select the **Search** button to obtain Search Results. Alternatively, you may press **Alt-S** to begin your search. You can also use Alt-key combinations for other buttons like the Search button that have a letter underlined. You can press the **Clear** button at any time to begin a new search.

SPECIAL MESSAGES

You may receive one of the following two messages if there are no matches for the occupation you have entered, or if the system does not recognize the MOC code you have entered.

No Matches Found

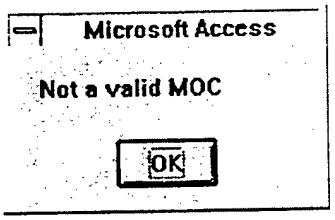
If no linkages were found for the occupation you entered, you will be prompted with this message:



You can still view and print the description for an occupation that has no matches by selecting **Yes**.

Not a Valid MOC

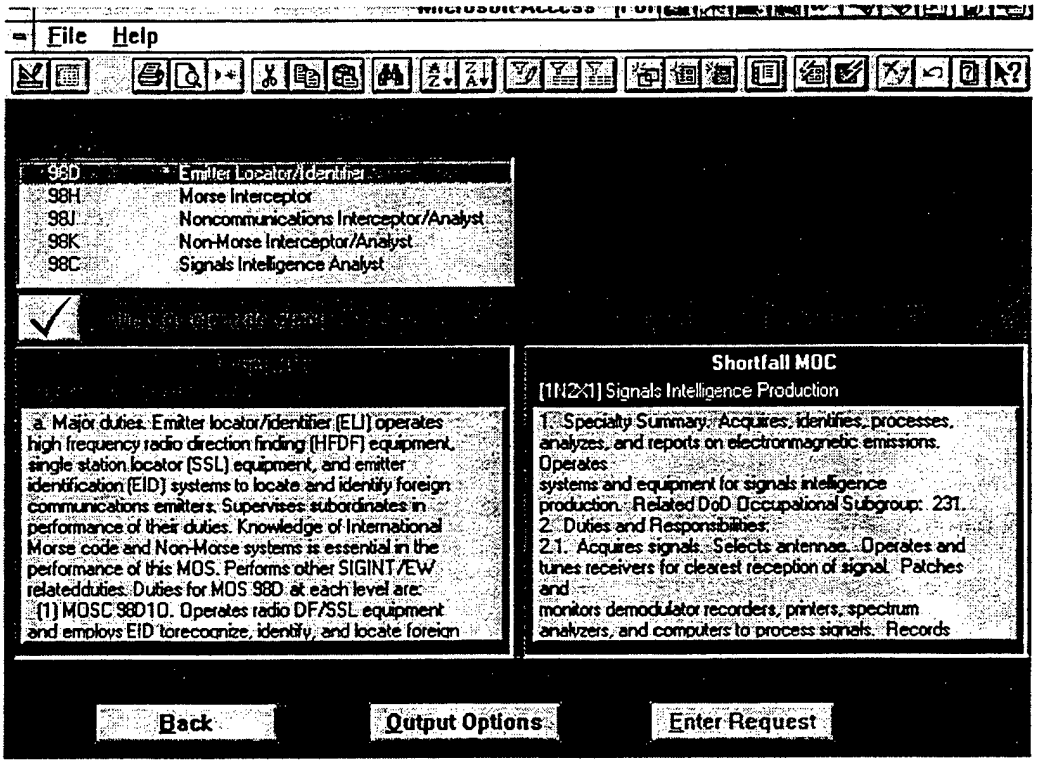
If the system does not recognize the occupation you entered, you will be prompted with this message:



Press **OK** to return to the MOC entry box and enter a different code. The MOC codes in the system are valid through 12/31/96.

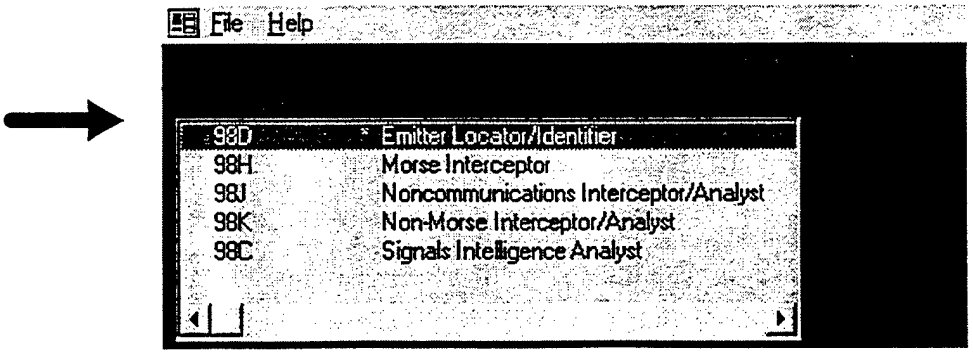
3.3 Understanding Your Search Results

The **Search Results Screen** presents you with the results of the search for links to the MOC you chose.



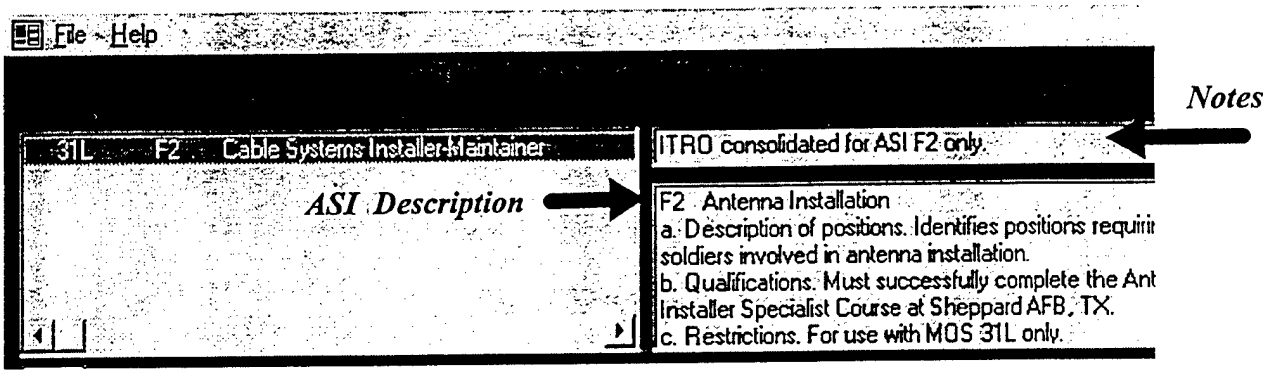
THE MOC LIST BOX

The MOC list box contains the list of targets that were linked to the shortfall occupation. An asterisk (*) next to an MOC indicates that it has a high degree of overlap with the shortfall occupation.



ADDITIONAL CODES

If any additional codes (e.g., ASIs, SQIs, and SIs) were linked to a target MOC, they will be listed next to the MOC in the target MOC list box. Their descriptions will appear in the upper right corner of the Search Results screen, next to the MOC list box when the desired code is highlighted.



Additional codes were only used when the Army was the target Service. If there are any notes about a specific match, they will appear next to the target MOC list box when that target is selected.

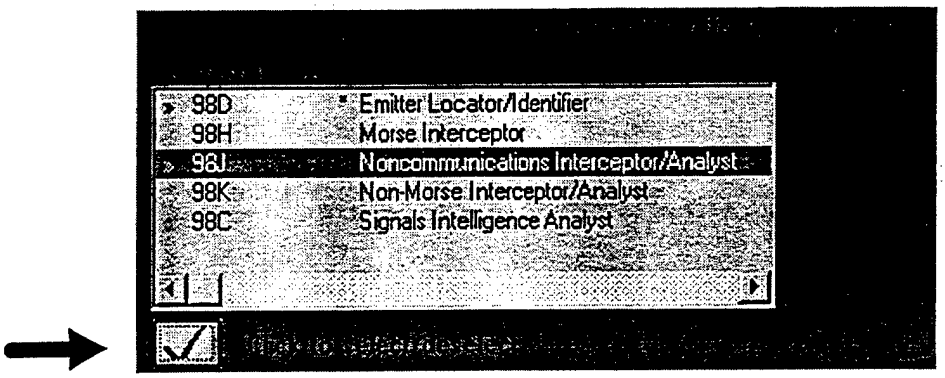
Narrative descriptions of both the shortfall and target occupations are provided to allow users to search for the particular skills desired. The box on the left contains the occupational description for the target occupation. The box on the right contains the occupational description for the shortfall occupation.

STEP 1 Review Target Lists

- Click on the desired target occupation to view its description.
- To view a different target description, just select that target MOC by clicking on it in the MOC List Box.
- To scroll down in either description box, click anywhere on the description text. This will access the scroll bar on the right side of the box, which you can then use to scroll up and down through the description.

STEP 2 Choosing Targets to Create Reports

After reviewing the target occupation descriptions, you can select the occupation(s) that you feel would best fit the shortfall situation.



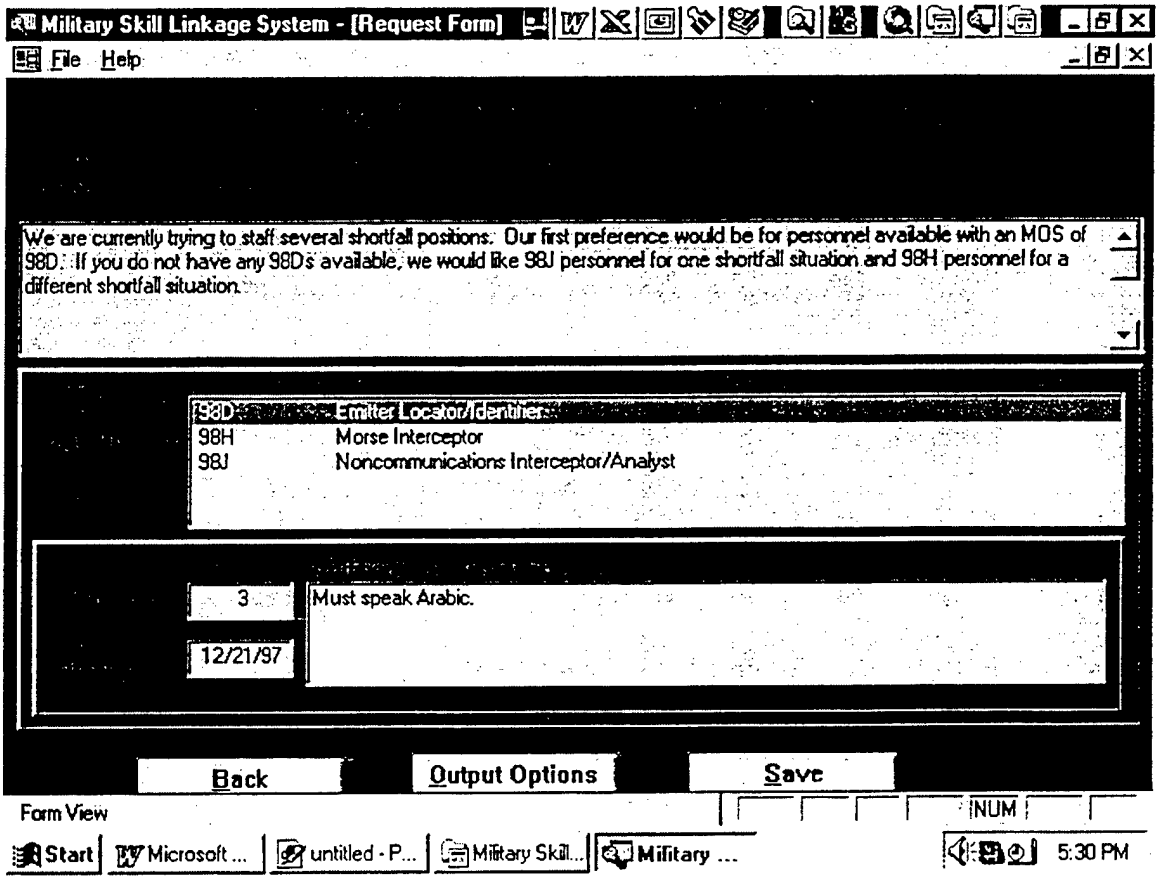
- Highlight the desired title in the MOC list box.
- Click on the check mark to select it.

Selected occupations will appear with an arrow symbol to the left of the code. Once you have selected all of the desired occupations, you can print out their descriptions or generate a staff request.

- To print, e-mail, or export the list of targets and occupational descriptions, select **Output Options**. (See section *3.5 Output Options* for detailed instructions).
- To create your own personnel request report, select **Enter Request**.

STEP 3 Completing Your Request

At the top of the request form, there is a blank box for you to enter any personalized text or special requests. The target occupations you have selected will be listed in the middle of the form.



- Enter your desired message in the box at the top of the screen.
- Click on the desired target occupation if you want to enter specific staffing requirements or instructions that pertain only to that target. You can enter the following information for each target:

  ⇒ Click in the # **Desired** box to type in the number of personnel desired.
  ⇒ Click in the **Date Required** box to enter the desired fulfillment date.
  ⇒ Click in the **Additional Requirements** box to enter any requirements specific to the shortfall situation. (e.g., language requirements)

- To print, e-mail, or export the report, press **Output Options.** (See section 3.5 *Output Options* for detailed instructions).

- If you would like to save a copy of the request, select **Save** after you are finished making revisions to the target occupation list.

  ***Once you save the request, you will not be able to add or remove the occupations listed on the report. You will only be able to modify the special requirements for the occupations listed.*
- Enter a name for the report and press **OK**.

3.4 Editing Previously Saved Requests

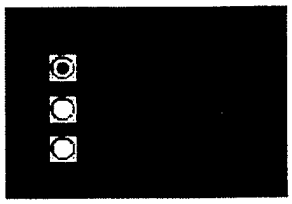
You may access previously saved reports by selecting **View Saved Requests** from the Main Menu. (Remember: select **File, Main Menu** to access the Main Menu).

This will bring you to the **Previously Saved Requests Screen**.

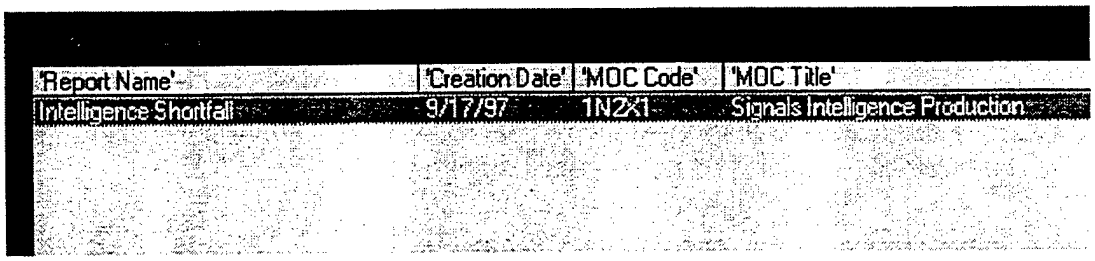
FINDING A REPORT

You may sort the list of saved reports based on:
- **Report Name** sorts titles alphabetically.
- **Creation Date** sorts by date, showing the most recent reports first.
- **MOC Code** sorts in numerical sequence of the MOC code.

To select any of these sorting options, click on the button next to the desired indexing method.



To edit, view, or delete a report from this screen, you must first click on a report to select it.



EDITING A REPORT

To edit a report, click on the **Edit Report** button once you have highlighted your selection.

You will then be returned to the Enter Request Screen. From the Enter Request Screen, you may change any of the notes and requirements you had previously written, and print out the revised report. However, you will not be able to add or delete targets.

DELETING A REPORT

To delete a report, select a report, and click on the **Delete Report** button.

OUTPUT OPTIONS

To print, e-mail, or export a selected report, press **Preview Report**. (See section *3.5 Output Options* for detailed instructions).

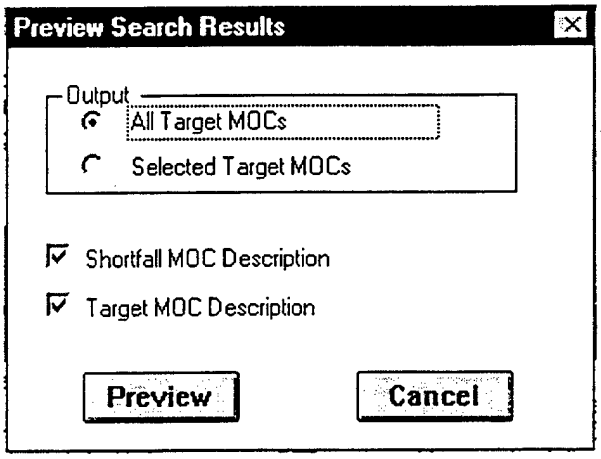
3.5 Output Options

The screens from which you can output are the **Search Results Screen**, the **Enter Request Screen**, and the **Previously Saved Requests Screen**. Output options include printing, exporting, and e-mailing.

To print, export, or e-mail MOC Descriptions, from the Search Results Screen:

- Click on the **Output Options** button

This will display the Preview Search Results box:



From this screen, you will decide which of the MOC Descriptions retrieved by the Search Results Screen you would like to output.

- Click in the box next to the desired options that you would like to print.

If you have opted to print Selected Target MOCs, only the descriptions of those MOCs that you selected on the Search Results Screen will print. Refer to section *3.3 Understanding Your Search Results* for instructions on how to select and deselect target MOCs.

Once you have selected your print options, then:

- Click on the **Preview** button and follow the instructions for the Preview Report Screen on the next page.

To print, export, or e-mail Reports, from the Enter a Request Screen:

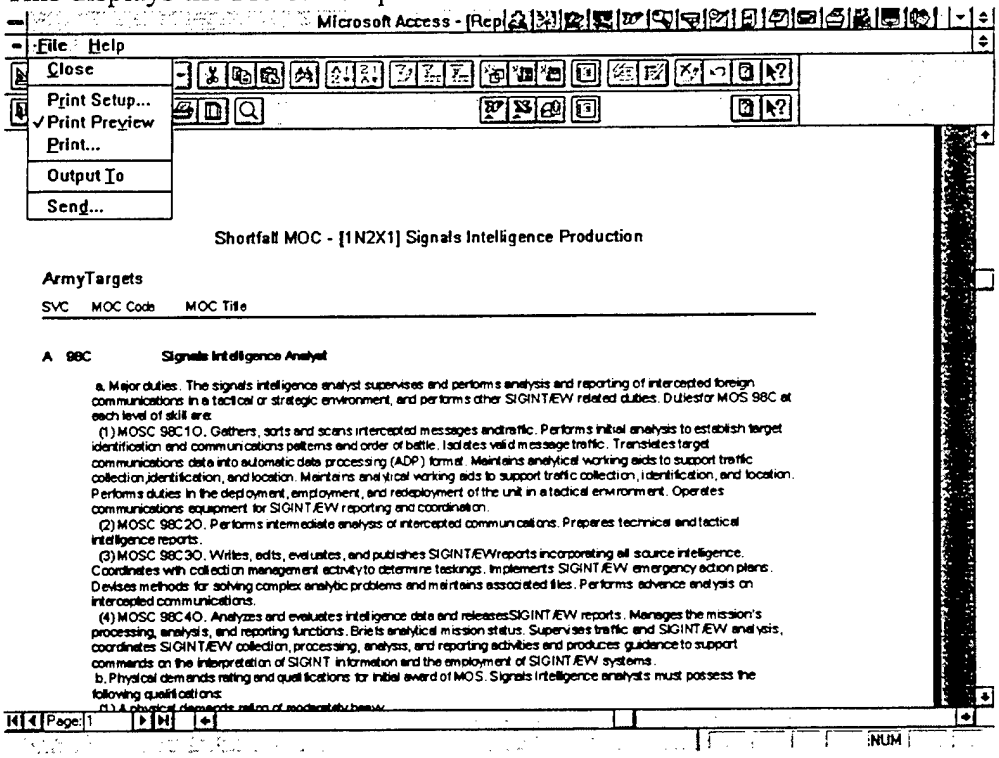
- Click on the **Output Options** button and follow the instructions below for the Preview Report Screen.

To print, export, or e-mail Reports, from the Previously Saved Requests Screen:

- Click on the **Preview Report** button and follow the instructions below for the Preview Report Screen.

PREVIEW REPORT SCREEN

This displays the Preview Report screen:



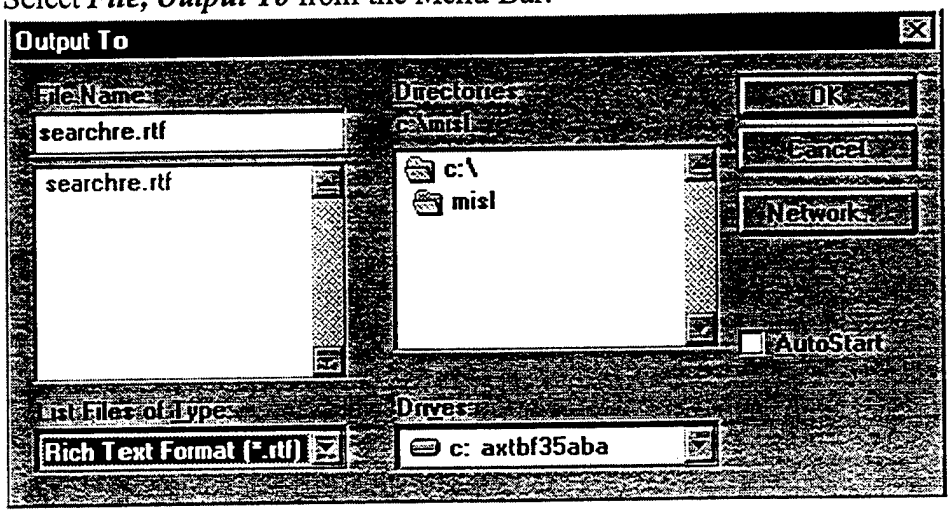
TO PRINT:

- Select ***File, Print*** from the Menu Bar.
- Click on the **OK** button.

***The format and appearance of printed reports may vary due to differences in printer drivers installed on your computer.*

TO EXPORT:

- Select ***File, Output To*** from the Menu Bar.



- Select a name for your file, by accepting searchre.rtf as your file name, or by typing in a name in the File Name box.

  *** If you choose to rename the file, make sure you keep the .rtf extension at the end of the name you enter.*

- Select an output destination, by choosing a drive and directory for your file to be located. This is where your report will be saved. The default destination will be the directory where MISL is installed (e.g. C:\MISL).

- Click on the **OK** button.

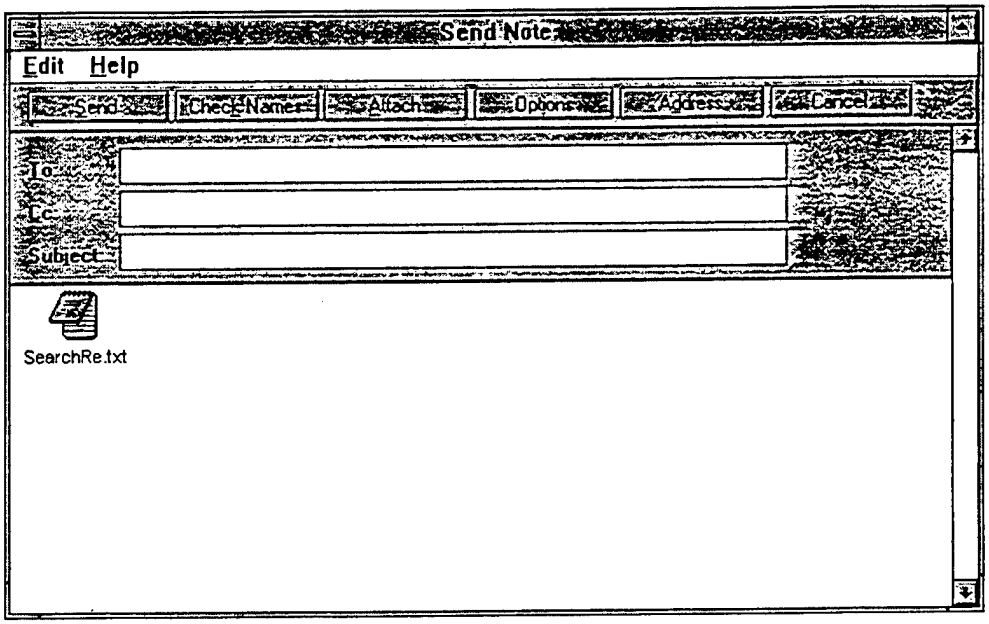
Once you have exported the file, you can open it using Microsoft Word™ or another word-processing application. You can use the tools available in your word-processing software to make modifications to the format of your document.

TO E-MAIL:

The MISL application uses the MSMAIL™ e-mail software that is already installed on your computer. If you do not have MSMAIL, you will not be able to take advantage of MISL's e-mail functions. Depending on which version of Windows you are running, the instructions will vary slightly.

- Select ***File, Send*** from the Menu Bar.
- Click on the **OK** button.

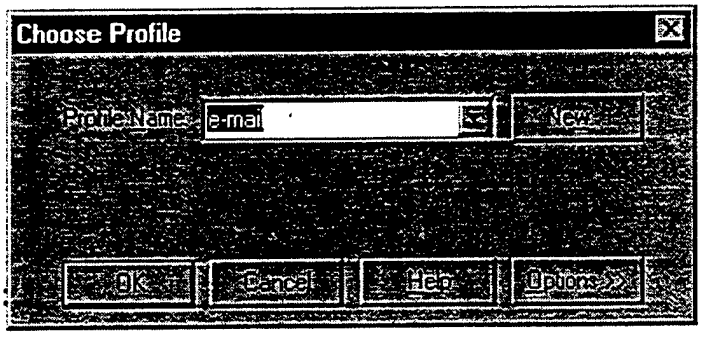
In Windows 3.1, the Send Note box will be displayed:



- Click in the **To:** box and type in the recipient's name.
- Click on the **Send** button to send the file. The file name will default to SearchRe.rtf. As with exported files, the e-mailed files can be opened using Microsoft Word.

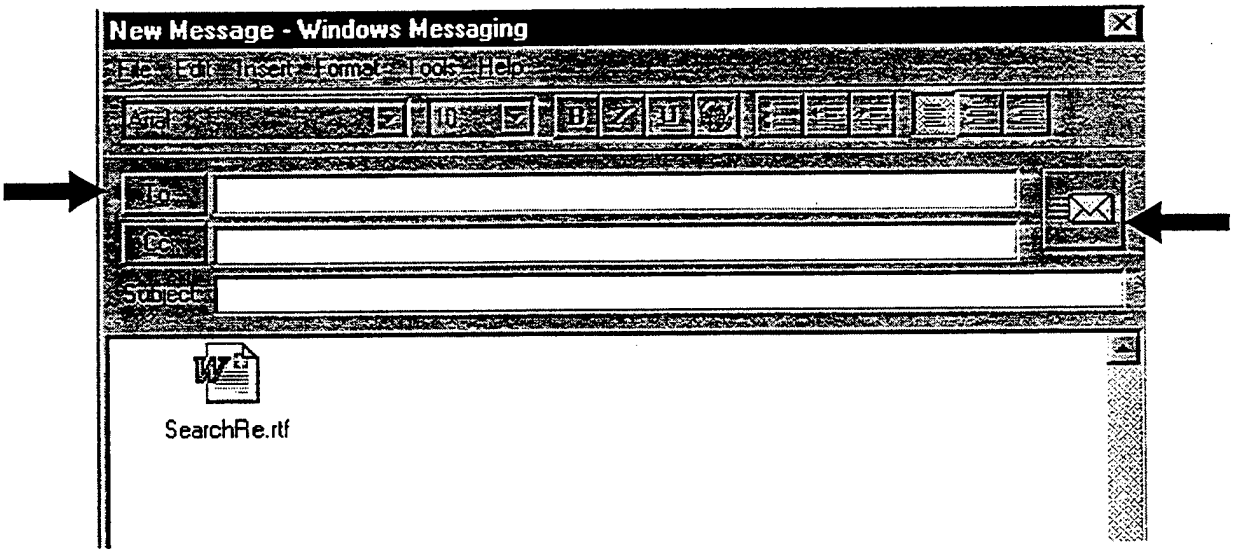
If you do not currently have the recipient's e-mail address in your e-mail's address directory, you will have to enter a new e-mail address using the **Address button in the Send Note box.

If you are running Windows 95, you will first be asked to choose a profile name. You will need to follow the on-screen instructions to set up a profile the first time you use the mail function. Once your profile has been saved, you simply select it when you want to send a document via MISL.



- Select the profile name and press **OK**.

This will display the Windows Messaging screen:



- Click in the **To:** box to select the recipient's name.
- Click on the envelope icon to send the file. The file name will default to SearchRe.rtf.

To exit from the output options screen, select ***File, Close.***

3.6 Exiting MISL

You may exit MISL at any time by selecting ***File, Exit*** from the Menu Bar. A **Quit** Button is also available from the Main Menu.